

CERTIFIED
TRANSCRIPT

NATIONAL FEDERAL MILK MARKETING ORDER
PRICING FORMULA HEARING

DOCKET NO.: 23-J-0067; AMS-DA-23-0031

Before the Honorable Channing D. Strother, Judge

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Carmel, Indiana

August 28, 2023

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Reported by:

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3 USDA-AMS Dairy Program:

4 Erin Taylor
5 Todd Wilson
6 Brian Hill
7 Michelle McMurtray

8 FOR The American Farm Bureau Federation:

9 Roger Cryan

10 FOR The International Dairy Foods Association:

11 Steve Rosenbaum

12 FOR The Milk Innovation Group:

13 Charles "Chip" English
14 Sally Keefe

15 FOR The National All-Jersey, Inc.:

16 John Vetne

17 FOR The National Milk Producers Federation:

18 Nicole Hancock
19 Brad Prowant

20 FOR Select Milk Producers, Inc.:

21 Ryan Miltner

22 FOR The California Dairy Campaign:

23 Lynne McBride

24 FOR The Chicago Mercantile Exchange:

25 Anne Krema

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27 (Please note: Appearances for all parties are subject to
28 change daily, and may not be reported or listed on
subsequent days' transcripts.)



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1 MONDAY, AUGUST 28, 2023 - - MORNING SESSION

2 THE COURT: On the record. Good morning. It is
3 Monday, August 28th, 2023. We're in Carmel, Indiana.
4 This is fourth day of the hearing.

5 Any preliminary business on the record?

6 Seeing none.

7 I hope everyone had a lovely weekend, a refreshing
8 one.

9 I understand we have a witness for the CME group,
10 Anne Krema, if I'm pronouncing it correctly, up first.

11 Good morning.

12 Raise your right hand.

13 ANNE KREMA

14 being first duly sworn, was examined and
15 testified as follows:

16 THE COURT: You may take the stand.

17 DIRECT EXAMINATION

18 BY MS. TAYLOR:

19 Q. Good morning.

20 A. Good morning, Erin.

21 Q. Can you state your name and spell your name for
22 the record?

23 A. Yes. My name is Anne Krema, A-N-N-E, K-R-E-M-A.

24 Q. And can you, for the record, give your business
25 address?

26 A. 20 South Wacker Drive, in Chicago, Illinois,
27 60606.

28 Q. Thank you.



1 Are you -- did USDA invite you here to speak
2 today?

3 A. Yes.

4 Q. On what topic?

5 A. On risk management.

6 Q. Did you prepare your testimony of your own
7 volition?

8 A. I did.

9 Q. And did USDA review any of your testimony in
10 advance?

11 A. No.

12 Q. For the record, we -- USDA knew risk management
13 would be a topic of conversation for the hearing, so we
14 asked the CME if they wanted to put some information on
15 the record in regards to their risk management tools they
16 have offered. So I will let Anne speak for them.

17 Thank you.

18 THE COURT: I take it this has been canvassed to
19 other parties?

20 MS. TAYLOR: Yes. They each have a copy, and it
21 will be online, shortly.

22 THE COURT: Very well.

23 MS. TAYLOR: But we would like to mark --

24 THE COURT: Yes, I have the next exhibit number as
25 77, although that doesn't sound right to me.

26 77 is the next number? 78.

27 Okay. Exhibit CME Group-1 is marked for
28 identification Hearing Exhibit Number 78.



1 (Thereafter, Exhibit Number 78 was marked
2 for identification.)

3 THE COURT: I guess we don't have direct
4 examination. You are going to simply make your statement.
5 Ms. Crema, thanks for being here.

6 THE WITNESS: Thank you very much.

7 THE COURT: You may proceed.

8 THE WITNESS: Thank you. Thank you for having me.
9 Hello, my name is Anne Crema. I serve as Director
10 of Agricultural Research & Product Development for CME
11 Group.

12 As the world's leading derivatives marketplace,
13 CME Group offers the widest range of global benchmark
14 products across all major asset classes and provides
15 clearing services to our customers around the world.
16 Thank you for inviting me to testify today regarding CME
17 dairy markets.

18 From the founding of the Chicago Board of Trade in
19 1848 as a venue for grain producers to manage their price
20 exposure, to the establishment of the Chicago Butter and
21 Egg Board in 1898, the origins of CME Group are deeply
22 rooted in agriculture. CME Group Agricultural Futures and
23 Options Markets serve as a key means for physical market
24 participants to minimize risk and protect themselves
25 against adverse price movements.

26 At CME Group, our primary product offering
27 includes futures and options contracts. A futures
28 contract is a legally binding agreement to buy or sell a



1 standardized asset on a specific date or during a specific
2 month. An option on a futures contract is the right, but
3 not the obligation, to buy or sell the underlying futures
4 contract at a predetermined price on or before a given
5 date in the future.

6 Commodities futures and options markets are
7 essential to producers, processors, retailers, and
8 consumers to help manage price risk throughout the supply
9 chain. CME dairy futures and options serve as hedge tools
10 for physical market participants, allowing them to lock in
11 either sale or purchase prices for milk or dairy products.

12 The Chicago Mercantile Exchange, a part of CME
13 Group, has worked continuously toward the development of
14 dairy futures and options markets since 1996 with the
15 launch of milk futures and options. Risk management
16 applications for CME dairy markets can extend from
17 producers to processors, traders, and end users of dairy
18 products.

19 With the support and collaboration of the
20 industry, CME Group has been able to expand our dairy risk
21 management complex from one commodity in 1996 to now
22 offering products on seven different dairy commodities.
23 Average open interest, or the average amount of open
24 positions held on a daily basis, equated to over 37
25 billion pounds of product across futures and options in
26 2022 compared to just over 2 billion pounds of product in
27 2000.

28 In addition to acting as tools to manage price



1 risk, futures markets also serve as a mechanism for price
2 discovery. Futures exchanges offer a venue for buyers and
3 sellers to lock in prices at a future date. This act of
4 buyers and sellers coming together and submitting bids and
5 offers or indications of what they are willing to buy or
6 sell for at a specific point in the future translates to
7 price discovery. When this happens on a forward-looking
8 basis, the industry is supplied with transparent signals
9 of where market participants expect prices to go, which
10 can help inform future business decisions.

11 Commercial hedgers rely on CME dairy markets to be
12 able to reduce their physical price exposure. While these
13 commercial hedgers look to minimize their price risk,
14 there are other market participants that are willing to
15 assume risk and take the other side of a trade. These
16 market participants are often referred to as liquidity
17 providers and deliver a critical function to efficient
18 futures and options markets. Liquidity providers will
19 often show both buy orders and sell orders in the market.
20 In doing so, these market participants expand liquidity
21 and offer the ability for hedgers to either establish or
22 close out of hedges more efficiently.

23 Liquidity providers frequently improve upon the
24 best buy and sell orders in the market and, thus, reduce
25 costs for both physical buyers and sellers. These market
26 participants offer a service to the marketplace and
27 physical industry, and without liquidity providers, the
28 overall ability to effectively manage risk would be



1 significantly reduced for participants throughout the
2 supply chain.

3 CME Group recognizes that the purpose of this
4 hearing is to discuss the need to evolve policy to reflect
5 current dynamics within the U.S. dairy industry. We do
6 not have a stance on the proposals submitted to the USDA.
7 We do, however, wish to ensure stakeholders are aware
8 that, depending on the timeframe for implementation, some
9 of the changes proposed could have an impact on risk
10 management solutions for the dairy industry.

11 When market participants enter into futures and
12 options positions, they do so based on underlying
13 assumptions informed by established contract terms.
14 Futures markets are either physically or financially
15 settled. In physically settled markets, final settlement
16 of the contracts occurs through physical delivery of the
17 underlying commodity. There will be a standardized
18 physical specification of the product eligible for
19 delivery as well as established delivery terms.

20 Alternatively, in financially settled futures
21 contracts, there is an index or price reference that is
22 utilized for final settlement of the contract. Market
23 participants are then credited or debited against the
24 pricing reference at expiration. Financially settled
25 contracts also have established terms on their respective
26 pricing references. Dairy futures products at CME Group
27 are all financially settled using underlying USDA
28 published pricing references.



1 CME dairy markets include futures and options on
2 Class III Milk, Class IV Milk, Cash-Settled Cheese, Block
3 Cheese, Cash-Settled Butter, Nonfat Dry Milk, and Dry
4 Whey.

5 Final settlement for Class III Milk futures is
6 based upon the USDA Class III price for milk for a
7 particular month, as first released. Likewise, final
8 settlement for Class IV Milk futures is based upon the
9 USDA Class IV Price for milk for a particular month, as
10 first released.

11 The prices for USDA Class III and IV milk, upon
12 which our futures contract settle, are derived from
13 Federal Milk Marketing Order (FMMO) formulas. Final
14 settlement for Cash-Settled Cheese, Block Cheese,
15 Cash-Settled Butter, Nonfat Dry Milk, and Dry Whey futures
16 are based upon the USDA monthly weighted average prices
17 for the respective product.

18 As the USDA publishes prices for both Class III
19 and IV milk, as well as the USDA monthly weighted average
20 prices for the aforementioned dairy products, are
21 dependent on the established, current FMMO formulas and
22 collection criteria for the National Dairy Product Sales
23 Report (NDPSR) surveys. Participants within CME dairy
24 markets enter into futures and options positions based on
25 the current FMMO formulas and NDPSR survey methodology.
26 Any changes to the Federal Order formulas or underlying
27 NDPSR survey methods could result in a material change to
28 the valuation of the contracts.



1 Due to the current methodology for deriving USDA
2 Class III and IV Milk prices incorporating Cheese, Butter,
3 Dry Whey, and Nonfat Dry Milk prices, there is a
4 relationship that exists between Class III and IV Milk
5 futures and the corresponding dairy product futures by
6 class. This relationship can act as a mechanism for
7 hedgers to manage both input and output costs. This
8 relationship also presents the trading community an
9 opportunity to provide liquidity to the market while
10 managing the risk they take on.

11 While some market participants may only have
12 exposure to either milk or processed dairy products,
13 liquidity providers can utilize the relationship between
14 milk and dairy products to offer additional liquidity to
15 either side of the market through spread trading or the
16 simultaneous buying and selling of different commodity
17 futures. At times, there are natural sellers of milk
18 looking to lay off risk, without an equal number of
19 natural buyers in the market. Additionally, there may be
20 times when buyers of dairy products are looking to lay off
21 risk when there is not the same amount of natural
22 sell-side participation in the market.

23 Liquidity providers help bridge this gap through
24 the spread relationship. This trading behavior, often
25 referred to as crush trading, accounts for a significant
26 portion of dairy futures and options participation. The
27 spread relationship and corresponding positions put on
28 across products are dependent on the FMMO formulas. If



1 the FMMO formulas are not known, the spread relationship
2 is jeopardized, and market participants may be reluctant
3 to put on hedges or take on risk in months where there is
4 uncertainty in this relationship.

5 CME dairy futures and options contracts are listed
6 for 24 consecutive months. On average, total daily open
7 interest, or the number of open positions held on a daily
8 basis, was 269,354 contracts across futures and options in
9 2022. When multiplied by contract size and converted to
10 pounds, this equates to 37.3 billion pounds of product.

11 CME dairy markets have grown substantially since
12 the introduction of milk futures and options in 1996. In
13 2000, average daily open interest was about 11,600
14 contracts. Average daily open interest in 2008 was about
15 85,800 contracts. From 2008 to 2022, CME dairy market
16 size increased over threefold.

17 We would like to present, looking from the years
18 2018 to 2022, the average distribution of open interest
19 throughout the forward curve. So this is -- this is
20 calculated based on days to expiration of open positions
21 held. You can see within three months of an equivalent --
22 estimated month equivalent by days to expiration that
23 47.49% of open interest is covered; over six months, about
24 75.14% of open interest is covered; over nine months,
25 90.38% of open interest is covered; over 12 months, 97.34%
26 of open interest is covered; over 15 months, 99.60% of
27 open interest is covered; throughout 18 months, 99.97% of
28 open interest is covered; and up to 21 months and on, 100%



1 of open interest is covered.

2 While the majority of open interest resides within
3 the first 12 months on average, the utilization of
4 contract months beyond 12 months can vary throughout the
5 year. Anecdotally, commercial hedgers often look to lock
6 in hedges for the following calendar year beginning in the
7 mid to late summer months. This behavior can be observed
8 in this chart, as the average open interest for contracts
9 with over 360 days to expiration increases during the
10 second half of the year. The greatest utilization of
11 contracts up to 18 months out occurs in August.

12 And this is also looking at 2018 to 2022 on
13 average.

14 While there are numerous proposals being discussed
15 in this hearing that could result in material changes to
16 CME dairy markets, we are providing an isolated,
17 hypothetical example in order to demonstrate possible
18 impacts to open interest for a range of proposed changes
19 to Make Allowance.

20 We provided two examples here of what we know are
21 proposed changes to Make Allowance, and one being an
22 initial proposed change to Make Allowance. In Example 1,
23 with the cheese Make Allowance being \$0.24, butter
24 Make Allowance \$0.21, dry whey \$0.23, and nonfat dry milk
25 \$0.21, the overall impact to contract value from an
26 absolute value standpoint is \$88,351,560 looking at 2022
27 average open interest and futures equivalent positions.

28 In Example 2, with the cheese Make Allowance at



1 24-point -- 24.22 cents, butter Make Allowance at .2251,
2 dry whey Make Allowance at .2582, and nonfat dry milk
3 Make Allowance at .2198, the overall impact to average
4 2022 open interest would have been \$115,819,440 to the
5 open positions on average.

6 CME Group routinely files changes to contract
7 specifications that are subject to Commodity Futures
8 Trading Commission, or CFTC review, which may be due to
9 changes in the underlying commodity or to maintain
10 compliance with the core principles set by the Commodity
11 Exchange Act and CFTC Regulations. These changes can
12 include adjustments to product quality and grading
13 standards as informed by continuous industry engagement.

14 Generally, when material changes are made to
15 contract specifications, the changes are either applied on
16 contracts without open interest or are communicated to
17 market participants with sufficient notice in such a way
18 that the changes will not disrupt settlement or other key
19 market features.

20 CME Group has made various changes over the years
21 to the Live Cattle futures contract to ensure that it
22 continues to suit the needs of the evolving commercial
23 industry. In 2019, for example, we filed a rule change
24 submission to the CFTC to change both the quality grade
25 and deliverable weight requirements for the contract.
26 Both of these changes were considered material changes as
27 they were changes to the underlying contract terms, and it
28 was expected that there could be an impact to contract



1 value. As such, these changes were announced in August of
2 2019 to be implemented in February of 2021, out beyond
3 open interest.

4 To provide another example, in December of 2008,
5 CME Group announced several changes to the Wheat futures
6 contract. Two of the changes, adding new delivery points
7 and introducing seasonal storage rates on the contract,
8 were determined not to be material changes that would
9 impact the value of the contract and thus were implemented
10 in July 2009, which applied to some contracts with open
11 interest.

12 There was also a change announced to the
13 underlying delivery grade in December 2008. Because the
14 change to the underlying delivery grade in the physical
15 contract specification was determined to have a material
16 impact on price, this change was not implemented until
17 September of 2011, beyond open interest.

18 There are certain mechanisms utilized for other
19 futures markets at CME Group that require transparent,
20 readily available data to update contract terms on an
21 ongoing basis. One such example of a dynamic adjustment
22 mechanism is Variable Storage Rates, or VSR, in wheat
23 futures.

24 VSR is a market-based determinant of maximum
25 allowable storage charges for outstanding wheat shipping
26 certificates. The respective storage rate for a defined
27 duration of the contract's lifespan is determined by the
28 price relationships between contract months in the wheat



1 futures markets.

2 In the case of VSR, this adjustment mechanism was
3 introduced to the market with advanced notice and is now
4 an established contract term in the respective CBOT rule
5 books. Additionally, the data required to determine the
6 storage rate is available to the public on a daily basis.

7 As previously mentioned, market participants have
8 entered into Class III and IV positions, as well as spread
9 positions across dairy products, based on the current FMMO
10 formulas for Class III and IV milk and the current
11 collection methods for the NDPSR product surveys. Making
12 a change that would have an impact on settlement values on
13 contracts with significant open interest could result in
14 both physical hedgers and liquidity providers losing
15 confidence in CME Group dairy markets and reducing or
16 eliminating participation, which would put strain on the
17 industry's ability to manage risk overall.

18 In addition to CME Group cleared dairy markets,
19 there are other risk management tools utilized in the
20 industry that could be impacted if liquidity in CME dairy
21 futures and options markets suffers. The over-the-counter
22 market, or OTC market, is utilized by commercial hedgers
23 when CME markets may not suit a market participant's risk
24 profile or hedging needs. These bilateral trades are not
25 cleared and thus carry counterparty credit risk, but can
26 serve as an additional risk management solution for
27 hedgers, particularly in months further out on the forward
28 curve.



1 OTC market participants carry open positions off
2 exchange that are not represented in the CME dairy market
3 open interest presented earlier. The firms that offer
4 these OTC bilateral transactions take on risk from hedgers
5 and often in turn will lay off that risk using CME dairy
6 markets. If there is not sufficient liquidity available
7 for these firms to lay off the risk associated with
8 offering these hedge opportunities, the overall capacity
9 for those firms to offer OTC risk management tools could
10 be reduced as well.

11 Producer insurance programs such as Dairy Revenue
12 Protection (DRP) are also related to CME dairy markets as
13 they rely on CME Group markets to inform the expected
14 prices quoted to producers when they purchase policies.
15 DRP has been adopted by many producers such that roughly
16 32% of U.S. milk production was covered on an effective
17 basis for calendar year 2022 by DRP. This equates to the
18 equivalent of over 364,000 milk futures contracts, or an
19 additional 72.8 billion pounds of milk covered by
20 additional risk management tools that could be impacted by
21 changes to CME dairy markets.

22 We recognize that this hearing process has been
23 publicly communicated, and it could be suggested that
24 there is enough warning for futures market participants to
25 be aware that a change is likely coming. Until a final
26 decision from these hearings is issued, however, the
27 ultimate valuation of these products, Class III and IV in
28 particular, remains uncertain.



1 The spread relationship that provides the hedging
2 community further opportunities to transfer risk is also
3 uncertain. This uncertainty could potentially deter
4 participation in CME dairy futures and options markets.
5 In the meantime, as concerns around this uncertainty grow,
6 liquidity in dairy markets may suffer.

7 CME Group supports the industry's initiative to
8 evaluate changes to modernize the pricing policy for dairy
9 in the U.S. While we do not take a stance on the various
10 proposals submitted, we would advocate that the USDA
11 consider futures and options markets and the long-term
12 viability of risk management tools for the industry when
13 establishing implementation plans. Considering an
14 implementation date that would not impact contract months
15 with significant open interest once a final decision is
16 issued could alleviate many concerns around the future
17 viability of risk management tools for the U.S. dairy
18 industry.

19 Thank you.

20 THE COURT: Very well. Any cross-examination
21 with -- or direct by AMS, I suppose, since it is -- you
22 have called the witness, so -- you go first or last on
23 this one?

24 MS. TAYLOR: Last.

25 THE COURT: Last. All right. I assume by
26 agreement, AMS, even though they are the ones who
27 requested the witness, will go last with this witness.

28 Any cross-examination by any other party?



1 Mr. English, are you preparing to --

2 MR. ENGLISH: I don't want to go first.

3 THE COURT: I know the feeling but -- is
4 Mr. English the only person desiring -- the only party --
5 okay.

6 Ms. Hancock?

7 MS. HANCOCK: Your Honor, this is a little
8 unconventional because we have only been going for a few
9 minutes, but given that we just got the testimony this
10 morning, would it be okay if we took a ten-minute break so
11 we could digest a little bit and gather our thoughts?

12 THE COURT: Is ten minutes enough.

13 MS. HANCOCK: Probably not, but, you know, I'll
14 take what I can get.

15 THE COURT: Well -- any objections? Let's -- I
16 mean, I think we should take 15 and do this in an orderly
17 manner, as is the word of the day -- or the word of the
18 Friday of last week.

19 Sure. Take 15 and let's reconvene at 20 of 9:00,
20 8:40.

21 MS. HANCOCK: Thank you.

22 (Whereupon, a break was taken.)

23 THE COURT: Okay. We're in session. Back on the
24 record.

25 Your witness, Ms. Hancock.

26 MS. HANCOCK: Thank you, your Honor.

27 CROSS-EXAMINATION

28 BY MS. HANCOCK:



1 Q. Good morning, Ms. Crema. I'm wondering if you
2 could start off by telling us a little bit about your
3 educational and professional background.

4 A. Sure. So I have a Master's and -- I'm sorry, I
5 studied at the University of Michigan in economics and
6 statistics. I majored in economics and minored in
7 statistics. And I have worked in with CME and with the
8 dairy markets for almost a decade now. So I currently
9 serve as director of research and product development over
10 livestock, dairy, and weather products at CME. So my
11 function right now is making sure that our -- in addition
12 to looking at new product opportunities, that our current
13 products are working for the market.

14 And prior to this role, I worked as a sales and
15 relationship manager for the dairy industry, so I -- I
16 worked in conjunction with the dairy industry and making
17 sure that the current products that we offered worked for
18 them, going back to when we electronified the spot dairy
19 markets, when we launched block cheese, when we launched
20 spot whey. So worked with the dairy markets for over --
21 over -- about ten years on a number of initiatives, cross
22 products.

23 Q. Okay. And did you say you have your Master's
24 degree?

25 A. I'm sorry, I misspoke. I have an undergraduate
26 degree from Michigan.

27 Q. Okay. But I can -- I can tell from your
28 experience that it's the life experience as well that's



1 even more meaningful here too.

2 And did you say you worked in the private sector
3 as well as for CME?

4 A. Just with the CME my career.

5 Q. Okay.

6 MS. HANCOCK: Your Honor, I would offer Ms. Krema
7 to be recognized in this proceeding as an expert on risk
8 management and trading of futures market in the dairy
9 industry.

10 THE COURT: Yes, I find Ms. Krema is qual- --
11 well, any objections?

12 I find Ms. Krema's qualified to testify on that
13 subject matter as an expert.

14 MS. HANCOCK: Thank you, your Honor.

15 BY MS. HANCOCK:

16 Q. So with that in mind, I'm going to ask you a few
17 questions. You will just have to bear with me because
18 this is not my area of expertise.

19 I want to just chronologically go back to a couple
20 of things in your testimony. Obviously the CME has been
21 around for more than a century, but it wasn't until 1996,
22 that you said that milk futures and options were launched
23 with it for trading purposes?

24 A. Uh-huh.

25 Q. Is that a "yes"?

26 A. Yes.

27 Q. If you say "uh-huh," the court reporter -- well,
28 she'll probably know but --



1 A. Yes.

2 Q. -- we would like our record to be clear.

3 And can you tell us how that happened, how that
4 evolved, do you know?

5 A. Sure. So as -- I guess as some of the dairy
6 industry -- some of the regulation was removed and some of
7 those -- the pricing regulation in the '90s, I think the
8 need for risk management tools within the dairy industry
9 increased. I know there were a number of other exchanges
10 that tried to launch dairy futures prior to our launch in
11 1996 with the original milk futures and options contract.

12 We then in the year 2000 evolved those contracts
13 to a Class III milk contract and later launched a Class IV
14 milk contract as well. So as -- as the need for price
15 risk management tools had increased in the late '90s and
16 in the early 2000s, that -- that brought about the initial
17 launch of the milk products. We did also have butter and
18 whey contracts, and we later launched cheese -- we later
19 launched the current cheese contract, cash-settled cheese,
20 in 2011, and block cheese more recently, as well as nonfat
21 dry milk.

22 Q. Okay. So you said there was a need that
23 developed.

24 What do you mean there was a need that developed?

25 A. The need for the physical market to be able to
26 imagine their price risk exposure. So as -- you know, as
27 with the origin of any of our markets, market participants
28 are either on the buy side or the sell side exposed to



1 that market moving against them, and our tools of futures
2 and options offer them the ability to lock in that price
3 at a future date --

4 (Court Reporter clarification.)

5 THE WITNESS: So, you know, whether you are a
6 buyer or seller in the physical market, where you are
7 throughout the supply chain, if you have that price risk,
8 if the market either moves against you, it moves up
9 against you or down against you, our markets have served
10 as tools to be able to lock in, you know, a price at a
11 future date and time, either a purchase or a sale price,
12 to minimize your price risk exposure.

13 BY MS. HANCOCK:

14 Q. Okay. And you said it wasn't until 2000 that you
15 had Class III contracts that were available?

16 A. Yes. As it currently stands.

17 Q. And then you said Class IV arose at some time
18 later.

19 Do you know when that was, approximately?

20 A. I -- I don't want to say the specific date on the
21 record, but I believe it was 2000 as well.

22 Q. Okay.

23 A. Later that year, 2000.

24 Q. Okay. So it's a -- it's a -- it's a market that
25 when it started in 1996, continued to evolve, it seems
26 pretty significantly over the years to follow. Is that
27 fair?

28 A. Yes.



1 Q. Okay. And you said in 2011 something else
2 occurred, and I didn't get it written down. What was
3 that?

4 A. That was when we launched our cash-settled cheese
5 contract, which after Class III milk is our most active
6 contract. It's evolved and grown quite a bit in terms of
7 utilization for hedge tools for the industry, but that
8 didn't launch until 2011.

9 Q. Okay. And then were there continued evolution --
10 evolutionary steps in -- in the milk futures and options
11 risk management tools that evolved after that as well,
12 after 2011?

13 A. Yes. So we -- we have since also launched a block
14 cheese contract. We launched that a number of years back.
15 And that specifically settles the block cheese price,
16 whereas our cash-settle cheese contract takes into account
17 both block and barrel cheese.

18 Q. What did you say was the one that took into
19 account the block and barrel?

20 A. Cash-settled cheese.

21 Q. Cash-settled cheese.

22 And do you know when the block cheese was
23 implemented?

24 A. It was -- I believe it was 2020, but I don't want
25 to -- I don't want to state the specific date on record
26 without it in front of me.

27 Q. Okay. It is fair to say some -- on or around
28 2020?



1 A. Yes.

2 Q. Okay. And then what about the cash-settled block
3 and barrel?

4 A. The cash-settled cheese contract was in 2011.
5 Again, I -- I don't have that specific launch date in
6 front of me right now.

7 Q. Okay. I'm just curious to kind of get a little
8 rough estimate on this -- the chronology of it.

9 Because then you did a comparison. You say
10 37 billion pounds of product across futures and options in
11 2022 compared to just over 2 billion pounds of product in
12 2000. That seems like that's a significant growth in a
13 22-year period. Is that fair?

14 A. Yes. Yeah. Absolutely.

15 Q. And do you think that that is in part attributed
16 to just the evolutionary changes that occurred in the
17 contracts that were available?

18 A. Yes. I -- I think it's a combination of it also
19 takes time for markets to evolve and to develop. CME
20 dairy markets are still in a development phase if you
21 compare it to our grain contracts that have been around
22 since the mid 1800s. So, you know, 1996 really isn't that
23 long ago. So part of it is it takes time for contracts to
24 develop. It takes time for risk management to be adopted
25 within an industry. But then also adding additional tools
26 throughout that time.

27 And then, you know, more recently we have seen
28 spikes with other tools. Like I mentioned DRP and the OTC



1 market that are tied back to our markets also contribute
2 to that liquidity as well.

3 Q. Okay. Is it also fair to say that when there is
4 economic pressures put on a market, like for the dairy
5 producers and what they have experienced over the last
6 decade or so, that that also can be a driver in
7 participation in the program?

8 A. Yes. Yes. I think that's fair when -- when, you
9 know, the market expects additional price risk, it -- it
10 sparks more participation in the market.

11 Q. And have you seen a growth in the number of dairy
12 producers who participate in using those risk management
13 tools as well?

14 A. I -- I don't have that information in front of me.
15 Overall we have increased significantly in terms of the
16 number of individual market participants in our market
17 since -- certainly since 2000, the number of individual
18 firms. And there's also limitation of what, you know,
19 we're able to see on a client basis. But I think it's
20 fair to say that there's been a -- a vast increase in
21 individual use in the market, yes.

22 Q. Does the CME provide kind of -- or through any of
23 the roles that you have held, do you provide any kind of
24 training to the marketplace or educational opportunities
25 such that you're interacting with dairy producers who
26 would be trading in the futures market?

27 A. We do -- we provide a -- with -- partnering with
28 ADPI, we have a risk management seminar every year. So



1 that's an in-person seminar that we offer. We also offer
2 risk management educational tools on our website. So
3 there's modules and tools that we -- we offer to the
4 public for, you know, introduction to futures and options
5 as well as more specific information on -- on the dairy
6 markets. We also partner and support a lot of the brokers
7 in the industry that do a lot of that direct education
8 with producers and end users and processors as well.

9 Q. So just through your role anecdotally, you hear
10 about what's happening in the industry and how dairy
11 producers are using the futures market as well?

12 A. Yes.

13 Q. Okay. If we move a little bit forward into your
14 testimony, I'm on page 2, you talk about how some of the
15 proposed changes could have an impact on risk management
16 solutions for the dairy industry.

17 Did -- have you read through the proposals that
18 are being heard at this hearing?

19 A. Yes.

20 Q. And have you done any kind of analysis on -- on
21 those proposals?

22 A. So the example we provided in terms of a possible
23 range of outcomes to Make Allowance, we wanted -- you
24 know, we understand there's obviously many proposals being
25 discussed here and didn't want to speculate on, you know,
26 every outcome of -- of each proposal and the impact on our
27 markets. But we did want to provide an example of how,
28 you know, one of the Make Allowance proposals -- or two of



1 the Make Allowance proposals could impact open interest.

2 Q. And when you say the "examples," are you referring
3 to the work that you did in Figure 5 that's on page 6?

4 A. Yes. Yes.

5 Q. And Example 1 that you have noted there, that's
6 National Milk's Make Allowance Proposal Number 1?

7 A. Yes.

8 Q. And Example Number 2, is that what you understand
9 to be IDFA's year one Make Allowance proposal?

10 A. Yes.

11 Q. Okay. While we're there, I'm wondering if you
12 could help me understand how these numbers work a little
13 bit better. And you did explain it, so I apologize if I
14 am making you repeat it, but I feel like I just need to
15 understand it a little bit more.

16 If you look at -- well, let's look at -- go down
17 to change in value to the average 2022 futures equivalent
18 open interest.

19 Is that for Class III contracts?

20 A. That is for Class III contracts, yes. That's --
21 that sixty -- negative 65 million, that's for Class III.

22 Q. Okay. So where you have that negative \$65 million
23 and some change, what does that -- what does that number
24 mean? Who is losing -- it says a negative, so it means
25 somewhere that somebody's losing \$65 million. Can you
26 tell me what that means?

27 A. I wouldn't speculate on winners and losers in that
28 situation, but we were -- what we were looking to show is



1 just the impact to the contract settlement on -- you know,
2 on average to the amount of open interest throughout 2022.
3 So that, you know, the \$0.58 decrease from the
4 Make Allowance changes would have -- based on the average
5 open interest in 2022, would have that impact on the
6 Class III open positions on average.

7 Q. And so if I simplify this and I say that there are
8 buyers and sellers of a Class III contract, does this
9 amount reflect a \$65 million reduction in the value for
10 those contracts?

11 A. Yes.

12 Q. Okay. And then if we drop down three lines from
13 there, or three rows from there, you have change in value
14 to the average 2022 futures equivalent open interest.

15 Do you see that one?

16 A. Yes, that -- that should be for Class IV.

17 Q. Okay.

18 A. Apologies for that not being included.

19 Q. And if we look at the two columns above that,
20 that's just the calculation of those two numbers resulting
21 in that negative 23 million?

22 A. That -- so the negative 53 is that -- that change
23 to the Class III -- Class IV price in that situation. And
24 then the 1,060 would be the change in -- on an individual
25 contract. And then the 23 million is taking into account
26 the average open interest for 2022.

27 Q. Okay. And same that I asked you for the
28 Class III, this negative \$23 million, if there were a



1 buyer and seller on either side, this would represent the
2 difference in the valuation of those contracts?

3 A. Yes.

4 Q. Okay.

5 Okay. Let's turn to page 4 of your report. This
6 is -- I say of your report, Exhibit 78.

7 And I want to look at those percentages that you
8 have under Figure 3, the average open interest
9 distribution.

10 So the third column in where you have percentage
11 of the open interest covered on average, those are just
12 specific to each one of the time frames individually; is
13 that right?

14 A. That's right.

15 Q. And then the cumulative, you are just adding those
16 up so that you know the total amount of the open interests
17 that are covered?

18 A. That's right.

19 Q. So by -- by 12 months, 97.34% of the open
20 interests are -- on those contracts are covered; is that
21 right?

22 A. Looking at 2018 to 2022, on average, yes.

23 Q. Okay. And have those percentages changed over
24 time?

25 A. Not significantly. We -- we did look at a broader
26 timeframe, and it is -- they are in the same range. Going
27 back, you know, we also looked at 2015 to 2022 as well as
28 2013 to 2022.



1 Q. Do you recall how that -- did it -- did it
2 continue -- did the numbers continue to increase so that
3 with -- as time moved on, more of those open interests
4 were being covered?

5 A. I -- I don't want to speculate because I don't
6 have that in front of me right now. But it was -- it was
7 within the range.

8 Q. Okay. Nothing materially different?

9 A. Yes, nothing materially different.

10 Q. Okay. So is it fair to say that by the time
11 97.34% of the open interests are covered, that it's for
12 almost everything at that point; is that fair?

13 A. I wouldn't say "almost everything" -- you know,
14 it's not fair to say everything, but we just wanted to
15 show there is still additional open interest out beyond
16 the 97%. And we also did want to make the point, you
17 know, that we get demand from hedgers to lock in up to --
18 at least up to 18 months out. So we wanted to make those
19 points as well.

20 Q. Okay. And, well, you actually -- so by 18 months,
21 you are at 99.97% though?

22 A. Yes.

23 Q. And the delta between the 97 and the 99, is
24 that -- is that nominal in your opinion?

25 A. I -- I would not -- you know, I wouldn't take a
26 position on that. I think we want to just point to the
27 data, and I wouldn't individually take a position on that.

28 Q. Okay. Okay.



1 And so thinking about how far out those open
2 interests are covered, I know that you made some
3 concluding remarks that says that -- that you support the
4 industry's modernization of pricing policies for dairy in
5 the U.S., and you are not -- I understand you are not
6 taking a position to support or reject anyone's -- or
7 oppose anyone's proposal.

8 But you do support building in some features that
9 would create stability for risk management tools; is that
10 right?

11 A. I think we would advocate for consideration of
12 risk management tools in implementation.

13 Q. Do you have a timeframe in mind for how much time
14 you believe would be reasonable to build in to
15 implementation of any of the proposals?

16 A. We -- we don't have a position to suggest on a
17 specific timeframe, but we do want to continue to point
18 back to this -- to this open interest data distribution.

19 Q. And that's Figure 3?

20 A. That's Figure 3, correct.

21 Q. Okay. So the greater amount of open interests
22 that are covered, the greater amount of stability that
23 would be offered for implementation purposes?

24 A. Yes, I think that's fair.

25 Q. And so have you -- have you reviewed National
26 Milk's proposal for milk composition?

27 A. Yes.

28 Q. And you understand that National Milk has a



1 12-month implementation phase-in?

2 A. Yes, I do.

3 Q. And do you believe that that would be sufficient
4 to account for the risk management tools that are used
5 that would be affected by the milk composition?

6 A. I -- I can't take a position on that one way or
7 the other. I would -- I would -- I would point out that
8 there's still open interest beyond 12 months, but I also
9 acknowledge that 97.34% is covered by 12 months. I would
10 also -- I know that that proposal is specific to one --
11 you know, that lag is specific to one proposal, and, you
12 know, we do want to acknowledge that there are other
13 proposals that would impact contract evaluation and be
14 material impacts as well.

15 Q. Okay. And so when you say you want to acknowledge
16 that there's additional open interest, that's that two --
17 at least based on the 2018 to 2022 timeframe in Figure 3,
18 that's that 2.66%?

19 A. Yes. But I also would be remiss if we didn't, you
20 know, point out that we do get demand, and we know that by
21 the -- by the chart I presented earlier, this chart, that
22 hedgers do look to lock in, especially around the summer
23 months throughout that entire next year. So we do get
24 commercial demand for those contract months.

25 Q. Okay. And when you -- when you -- you mentioned
26 there's other proposals that don't have the same
27 implementation lag as the milk composition proposed by
28 National Milk.



1 The next one, at least in our chronology here for
2 this hearing, is barrel elimination. Do you have any
3 perspectives on a delayed implementation for the barrel
4 elimination proposal?

5 A. I think it -- it could be considered a material
6 impact to price. So we -- we would, you know, make the
7 same point that potentially anything with a material --
8 possible material impact to price, we would advocate for
9 consideration of the futures markets.

10 Q. Do you believe that the National Milk's barrel
11 elimination proposal would have a material impact on
12 price?

13 A. I -- I wouldn't speculate on that myself. But
14 I -- I think, you know, if it could be considered, that we
15 would advocate for a consideration of futures markets with
16 implementation.

17 Q. And have you done any kind of analysis to
18 determine if there is any -- any forecasted or anticipated
19 materiality impact to price?

20 A. That is out of scope of my direct testimony right
21 now.

22 Q. Okay. When you say "out of scope," does that mean
23 you didn't do that analysis or you are just not here --

24 A. That's --

25 Q. -- to talk about that --

26 A. For my direct testimony, yes, we don't have that
27 analysis in front of us.

28 Q. Okay. And then what about for higher-of, did



1 you do -- have you -- do you have any perspectives on the
2 materiality impact of the higher-of proposal?

3 A. We -- we do not for this testimony.

4 Q. And Make Allowance, we have at least your analysis
5 in Figure 5. Does that mean that you believe that there
6 would be a materiality impact for Make Allowance?

7 A. Yes, based on what we have -- what we have
8 understood from the expected changes to price.

9 Q. And -- and that's based on what you have outlined
10 there in Figure 5?

11 A. Yes.

12 Q. All right. And so if we were weighing and
13 balancing the impact to producers in -- in increasing or
14 maybe tempering the increases in Make Allowance, we would
15 use your Figure 5 as a -- as a counterbalance to that?

16 A. We -- it's a hypothetical example, so I -- I -- we
17 just -- we know that these are proposals out there, and
18 analysis was done based on open interest in 2022. But
19 that's a hypothetical example. I don't think we're saying
20 that this would be the outcome with certainty on the III
21 and IV prices.

22 Q. And what about Class I differentials, did you do
23 any kind of -- do you have a perspective on whether the
24 Class I differential proposal by National Milk would
25 materially impact any pricing mechanisms?

26 A. We don't have that analysis as part of this
27 testimony.

28 Q. And for the milk composition proposal that



1 National Milk has put forth, you understand that National
2 Milk's proposal is that it would occur every three years
3 if there was a change made?

4 A. I -- I don't have that in front of me, but I -- I
5 believe you if that is, yeah, the proposal, yeah.

6 Q. I'm just wondering if -- if given the option of
7 having a change annually versus every three years, if you
8 believe that the three years would create less in -- less
9 of a disruption to futures risk than having it changed or
10 updated annually?

11 A. I would -- I would point back to our example with
12 variable storage rates. In that example, the data, it
13 comes from our futures markets where, you know, that data
14 is available on an everyday basis from market participants
15 to see. And so I -- I guess it -- I can't necessarily
16 answer one way or the other. I think it depends on the
17 availability of the data and making sure the marketplace,
18 you know, has advance notice and is able to view that
19 data.

20 There are -- there are mechanisms like VSR that
21 are written into the contract rules that update regularly,
22 but there -- you know, that was well known in advance
23 before those changes went in, and the marketplace knows
24 when those changes are coming. So I can't necessarily say
25 whether one year is better than three. I think it depends
26 on the availability of the data and the notice that the
27 market has.

28 Q. Is it fair to say that fewer number of changes



1 means that there would be fewer opportunities for -- for
2 any kind of market disruption to the futures risk
3 management practices?

4 A. I wouldn't necessarily take a position on that
5 because I think it can depend.

6 Q. Okay. On the -- on the visibility and being able
7 to expect when it's coming?

8 A. Yes.

9 Q. Okay.

10 MS. HANCOCK: Okay. Thanks so much. Appreciate
11 your time.

12 THE COURT: Further cross?

13 Mr. English.

14 CROSS-EXAMINATION

15 BY MR. ENGLISH:

16 Q. Good morning. My name is Chip English with Davis
17 Wright Tremaine. We represent the Milk Innovation Group.
18 Thank you very much for coming.

19 So I want to revisit some of the areas covered
20 just now, but it in a slightly different way.

21 Were you involved with the CME back in 2007, 2008
22 timeframe when USDA made the last changes to
23 Make Allowances?

24 A. I was not directly involved, no, but -- but I have
25 familiarity with our market since that time.

26 Q. Did you have familiarity with the market at the
27 time, though; is that -- or not?

28 A. I was not involved with that market at the time,



1 no.

2 Q. Okay. Would you know that USDA did not delay that
3 decision in 2007, 2008?

4 A. Yes.

5 Q. Okay. And so given the fact that these markets
6 were comparatively to now, newer, do you know whether the
7 change by USDA impacted open interest back at that
8 timeframe?

9 A. We -- we did see -- I would point back to
10 Figure 2. We did see a slight drop off in open interest
11 after 2008, so we did see some impacts. But I would --
12 you know, in comparing back to 2008, I would point to the,
13 you know, three times the market size growth that we have
14 seen since then. You know, we're in a different scenario
15 since then. We also have additional -- several additional
16 futures tools that we didn't have in 2008, like the cheese
17 futures that are most active dairy product contracts, as
18 well as other products being tied back to the CME dairy
19 markets, in addition to the three times market growth that
20 we have seen.

21 Q. But nonetheless, the market survived. The hedging
22 didn't go away because of the impacts of 2008, correct?

23 A. There was still hedging, yes.

24 Q. Now, I'm going to struggle, too, with -- with your
25 roles, and so bear with me. But when it comes to Federal
26 Order, I want to test -- or at least understand what your
27 understanding is.

28 So do you understand that given the rules of



1 practice that we operate under, none of us outside of
2 USDA, but certainly none of us in the industry, any
3 hedging entities, dairy farmers, processors, will know
4 whether USDA is agreeing to delay implementation, at least
5 until the proposed rule and then -- is issued?

6 A. Yes.

7 Q. Okay. And even that, as you point out, we may not
8 know what the final rules are until the final rule comes
9 out, probably, maybe, you know, around October 1st of
10 2024, correct?

11 A. Yes.

12 Q. Okay. Doesn't that mean that the risk to open
13 interest would already exist, given the fact that no one
14 can know, not only what the change is going to be, but
15 whether the change is going to be implemented immediately
16 or not?

17 A. There -- there is uncertainty from a regulatory
18 standpoint. I do think there is an unprecedented amount
19 of regulatory uncertainty in -- in this current scenario
20 with all of the proposals, you know, being discussed, as
21 well as just our market size now. So there's additional
22 regulatory uncertainty.

23 But I would point out as well, that you -- you
24 mentioned, I think, the industry doesn't expect -- you
25 know, they don't expect a decision on this in the early
26 part of 2024, but we have already started to hear
27 anecdotally that farms that would have already been
28 putting on positions for the second half of 2024 or



1 putting on spread positions are holding back on that, or
2 doing less of that because of that regulatory uncertainty.

3 And we have -- we have seen that as well in -- in
4 looking at the amount of contracts on average in August
5 that are beyond 360 days to expiration. We are -- we were
6 at about 4800 on average for August of contracts beyond
7 that 360 days, and compared to the 2020 -- 2018 to 2022
8 average, that is a 54% drop. So we are seeing a pullback
9 in people willing to put positions on in that second half
10 of 2024 and beyond.

11 Q. I don't have the document, yet, I'm trying to get
12 it as an exhibit. But I think -- I think that reflects,
13 if you compare 2022 to 2023 open interest, it pretty well
14 consistently is lower as you go down?

15 A. We don't have 2023 open interest here. This is
16 through the end of 2022.

17 Q. I understand. I'm sorry. I'm looking at, if you
18 compare August 22nd, 20- -- I'm sorry -- August 24th,
19 2022, going down 18 months, compared to the open interest
20 August 24th, '23, if you compared those two, it would
21 appear that open interest is down across the lines.

22 Would you agree?

23 A. I -- I don't have that in front of me, so I don't
24 want to speculate right now but --

25 Q. Okay. It wouldn't surprise you?

26 A. It wouldn't -- we are -- it's a slight on average
27 reduction in open interest on average this year, but
28 still -- still a record. I think second highest on



1 average open interest this year.

2 Q. But nonetheless, if -- if industry cannot know
3 whether they are dairy farmers, dairy processors, or
4 people who are middlemen, if they cannot know, not only
5 what the change is going to be, but when it's going to be
6 implemented, won't that all have the same impact on the
7 interest -- on open interest?

8 A. I don't know about the same impact and what you
9 mean by that. But there will -- if there's an
10 uncertain -- if there's uncertainty in where the Federal
11 Order formulas will land or that price relationship, that
12 will have an impact, a possible impact on people's
13 willingness to put on positions, either on the hedge side
14 or the liquidity provider side.

15 Q. And in fact, some of the volume trading
16 differences may be through over-the-counter contracts and
17 futures, correct?

18 A. That's possible, yes.

19 Q. Okay. So I also want to, if I can, explore the
20 impacts of some of these proposals. And given the fact
21 that this is not what I would call a traditional
22 cross-examination because you are here as a neutral
23 witness -- and believe me, everybody in this room wants
24 hedging to succeed. All right? That's not the point.

25 A. Uh-huh.

26 Q. So I want to explore maybe that two proposals may
27 have different impacts on open interest, if I may. And
28 those are the MIG allowance change, which you have done an



1 example of, and the component change that Ms. Hancock
2 discussed with you.

3 So I want to go first to your Figure 5 and ask one
4 question, and I'm going to try to run some more simple
5 examples, if I may.

6 So to the extent that many of these contracts
7 would be people -- would be dairy farmers or dairy
8 processors -- you agree that a lot of these contracts are
9 entered into by dairy farmers on the side, correct?

10 A. Yes.

11 Q. And dairy processors on the other side?

12 A. Yes.

13 Q. Okay. Let's assume that's 100%. I know it's not
14 100%, but assume for a moment that's 100% of the change in
15 value to the average 2022 futures equivalent open interest
16 that you have as a negative 65 million and change.

17 Do you see that?

18 A. Yes.

19 Q. Okay. Would the physical position on the other
20 side of the futures market be equal in a positive
21 direction?

22 A. It's not our place to address physical impacts.
23 We want to focus on the future side.

24 Q. I understand that. But I just want to be clear
25 that -- that may be the impact on the futures, but the
26 impact on people in the market, assuming my scenario of
27 100% dairy farmers and 100% processors, would be zero,
28 correct?



1 A. I'm sorry. Can you repeat the question?

2 Q. All right. Let me -- let me be simpler if I can.

3 Let's say --

4 THE COURT: Let me ask, how are we doing on speed?

5 (Off-the-record.)

6 BY MR. ENGLISH:

7 Q. So let's assume for a moment that there's a dairy
8 farmer who wants to hedge, and he enters into a futures
9 contract to sell milk at \$20 today.

10 (Court Reporter clarification.)

11 BY MR. ENGLISH:

12 Q. And the Federal Milk Order doesn't change, such
13 that at the time he sells his milk, he gets \$22 on the
14 milk, but he contracted to sell at \$20. He lost \$2 on the
15 hedge, but he got \$22 for the milk, so he gets \$20,
16 correct?

17 A. Correct.

18 Q. So now let's say that the same dairy farmer sells
19 at \$20 on a futures. But because of the Federal Order
20 change, he ends up settling to \$19.

21 He still ends up with the same \$20, correct?

22 A. Correct, in that scenario.

23 Q. So as long as you have to buy back at the physical
24 place, which happens automatically when the futures
25 contract expires, then the hedge will give you the same
26 outcome that you anticipated, correct?

27 A. That's -- that's the goal of hedging, yes, that
28 you are --



1 (Court Reporter clarification.)

2 THE WITNESS: Yeah. The goal when you are hedging
3 is to take the equal and opposite position so that you
4 offset any loss in your physical position.

5 BY MR. ENGLISH:

6 Q. So under that scenario -- and I want to -- this is
7 now focusing on the Make Allowances because I think the
8 components may be different.

9 Under that scenario, the dairy farmer has the same
10 level of interest today regardless of what Federal Order
11 change would be, correct?

12 A. I -- I don't know that I want to speak to that.

13 Q. All right. If I went through the calculations,
14 though, on the opposite side of the transaction for a
15 processor, it would be the same, it would end up with the
16 \$20, my example, correct?

17 A. On the other side of that --

18 Q. Yes, other side of the producer -- so if the dairy
19 farmer and the producer enter the contract, under my
20 scenarios, they both got the benefit of the bargain, one
21 wanted to sell milk at \$20 and one wanted to buy milk at
22 \$20, and in the end that's what happens, correct?

23 A. Yes.

24 Q. Okay. All right. So that's a futures contract.

25 So let's talk about an options contract. So I'm a
26 dairy farmer -- and I'm not -- but a dairy farmer wants to
27 know that the price she is going to receive is no lower
28 than \$20, but can still get the upside. And so that dairy



1 farmer buys a put option and gets the right to sell her
2 milk at \$20, no matter where the price will end up.
3 Again, no matter where the price ends up under the Federal
4 Order, that dairy farmer will get the benefit of that
5 minimum \$20, correct?

6 A. If they locked in that hedge, yes.

7 Q. And, again, the same thing on the opposite side of
8 the transaction if a processor wanted to buy milk at --

9 A. Yes.

10 Q. Yes. Okay.

11 Now, let me briefly turn and suggest that while
12 that would be true with the change in the Make Allowances,
13 that the result may be different when we talk to changes
14 in the components. And that is to say under multiple
15 pricing orders -- you understand that some of the Federal
16 Orders have multiple component pricing, and some do not,
17 correct?

18 A. Yes.

19 Q. Okay. So a dairy farmer under a multiple pricing
20 order may very well be expecting to get a premium to the
21 Class III because of their higher components, correct?

22 A. That may be true, yes.

23 Q. Okay. But in that example, the hedging for
24 components, if the components have changed, will not work
25 out the same as my prior example with Make Allowances,
26 correct?

27 A. Possibly correct.

28 Q. Okay. So I understand that maybe we're going to



1 have a limited conversation about Class I based upon your
2 answers to Ms. Hancock, but I nonetheless, you know, want
3 to ask.

4 She -- she -- she asked the question about what is
5 euphemistically is called higher-of, and let me rephrase
6 it and say what we're talking about is the base Class I
7 skim milk price.

8 Does that phrase make sense to you?

9 A. Yes.

10 Q. Okay. Do you have any experience post 2019 seeing
11 whether Class I hedging increased -- let me strike that.

12 Do you know -- and I don't want confidential
13 information like names or anything -- but do you know who
14 was hedging?

15 A. I don't have the same visibility that, say, market
16 regulation would, not at the individual client.

17 Q. You wouldn't know whether a market participant is
18 a Class I processor versus a cheese manufacturer?

19 A. Not with full visibility, no.

20 Q. Okay. So you wouldn't know and be able to tell us
21 whether since 2019, when the Congress changed the statute
22 for the base Class I skim milk price, whether there was
23 more or the same or less Class I sales market?

24 A. I wouldn't want to speculate, because it's also
25 difficult for us to tie that activity back specifically to
26 fluid milk hedging.

27 Q. So let me just briefly go back. Given the fact
28 that you are already seeing some change in open interest,



1 and given the fact that we won't know, not only what the
2 rule is but the implementation date from USDA until
3 October of next year, shouldn't risk takers be taking all
4 that into consideration when they make hedges?

5 A. Yes. I think, you know, there's an obligation
6 that you should be aware of risk you are taking on when
7 entering into a contract. But I do also think, you know,
8 if we're talking about changes to the underlying
9 assumptions that -- that, you know, are out of the normal
10 scope of what people would be taking on in terms of risk
11 from an uncertainty of regulation standpoint.

12 Q. But at least it is uncertainty where we have some
13 experience, correct?

14 A. Again, I wasn't directly involved in 2008, so I
15 know there's a lot being discussed here.

16 Q. Well, it's not exactly like a war in Ukraine
17 breaks out and impacts the whole world, right?

18 A. What do you mean by that? It does.

19 Q. Or it's not like we have COVID, and as a result,
20 because industry asked for it, USDA issues a Food Box
21 Program that alters all the pricing, is it?

22 A. I'm not really sure what you are trying to ask.

23 Q. Okay. Have you in preparing for this testimony
24 had discussions with market participants?

25 A. Yes.

26 Q. Okay. Can you tell us which ones?

27 A. No.

28 Q. Sorry?



1 A. I can't say which market participants I have
2 discussed with. We also discuss our markets as regular
3 course of business on an ongoing basis. You know, having
4 those discussions is part of our daily job at CME as well.

5 Q. All right.

6 MR. ENGLISH: I have no further questions. I
7 thank you very much for your time.

8 THE COURT: Yes, Mr. Rosenbaum.

9 CROSS-EXAMINATION

10 BY MR. ROSENBAUM:

11 Q. Steve Rosenbaum for the International Dairy Foods
12 Association.

13 If I could ask you to turn to page 6 of your
14 testimony where you have your table.

15 You -- you list there in three columns, first of
16 all, the current Make Allowances, correct?

17 A. Correct.

18 Q. And in the second column, the -- what's called
19 Example 1, the National Milk Producers Federation proposed
20 changes in the Make Allowances, correct?

21 A. Correct. That's where we pulled those numbers
22 from, yes.

23 Q. And what you have as Exhibit 2 is year one of the
24 International Dairy Foods Association proposed revision to
25 the Make Allowance; is that correct?

26 A. That is where we pulled that example from, yes.

27 Q. And are you aware that the International Dairy
28 Foods Association year one proposed Make Allowances



1 represents 50% of what International Dairy Foods
2 Association says should be the change in the
3 Make Allowances?

4 A. Yes, I am aware of that. We wanted to show what,
5 you know, that initial impact of the change would be.

6 Q. Okay. And so if you were to be comparing the
7 National Milk Producer Federation proposal to the
8 ultimate, if you will, International Dairy Foods
9 Association proposal, the number for the cheese
10 Make Allowance would be something in excess of \$0.28 for
11 IDFA, correct?

12 A. I believe I do have those numbers.

13 The cheese Make Allowance, .2840.

14 Q. Yes. And -- and simply -- one can simply subtract
15 from the number in Example 2, the number listed as
16 current, and double that difference, and that will tell
17 you what the IDFA ultimate proposal is; is that correct?

18 A. I'm sorry. You are saying subtract from
19 Make Allowance or from --

20 Q. Well, I mean, for -- like an example -- just in
21 Example 1, the way it would work is you -- you take the
22 .2422, you subtract the .2003, and whatever that --
23 whatever that number is, you double that and add it to
24 .2003, and that will tell you what the IDFA proposal is;
25 is that correct?

26 A. I don't want to speculate.

27 Q. Well, I'm just -- I'm just -- if Example 2 is
28 halfway to what IDFA is proposing in terms of an increase



1 in the Make Allowance, then you simply double whatever
2 that increase is --

3 A. Yes.

4 Q. -- to get to the ultimate number, correct?

5 A. I -- I -- I understand that the ultimate number is
6 .2840 for IDFA Make Allowance.

7 Q. All right. And you can -- and one could do the
8 same calculation for all the other Make Allowances,
9 correct?

10 A. I understand that the butter Make Allowance is
11 .2785, .3172 for dry whey, and .2716 for nonfat dry milk.

12 Q. Okay. And that's IDFA's proposal, correct?

13 A. That's full Make Allowance change. As far as I
14 understand, yes.

15 Q. Okay. And I take it you are familiar with what
16 role Make Allowances play in the pricing of -- in the
17 setting of Class III and IV prices; is that correct?

18 A. Yes, familiar.

19 Q. Okay. And -- and are you aware that
20 fundamentally, one -- take cheese as an example --
21 determine what the Class III price is, one does a survey
22 of what people are actually selling cheese for, one
23 deducts the Make Allowance, and what's left is the amount
24 that gets paid to the dairy farmer?

25 A. That may be an oversimplification, and I would
26 defer to the experts in the room on that. But I -- I
27 understand the role that Make Allowances has in the
28 formulas.



1 Q. I couldn't quite hear what you said.

2 A. I -- I don't want to oversimplify as I would defer
3 to the experts in the room on the formulas themselves.
4 But I understand that Make Allowance is a part of those
5 formulas that derive Class III and IV milk, yes.

6 Q. And by so doing, it drives the amount that has to
7 be paid to the dairy farmer, correct?

8 A. Yes.

9 Q. Okay. So -- and are you aware that as a general
10 matter, at least if you are selling the commodity product
11 that is being subject to CME trading, and that is used to
12 set class prices, that as a processor, you are, in
13 essence, limited to the Make Allowance in terms of the
14 money you get to hang on to?

15 A. I don't want to speak to the -- on the physical
16 side of the money that the processors get to keep.

17 Q. Okay. But -- but you -- you do understand that
18 the whole concept behind raising the Make Allowances is
19 that you would be increasing the amount of money that the
20 formulas are assuming it costs a manufacturer to make the
21 product, correct?

22 A. I -- I don't want to speak directly. I think
23 that's outside of my -- what I'm intending to testify on.

24 Q. Well, I'm just trying to understand whether you --
25 you know, you have done some calculations here.

26 A. Yes.

27 Q. You must have some general understanding of the
28 purpose served by Make Allowances.



1 A. I -- I do, but I want to focus -- we wanted to
2 focus on the impact to futures markets and not on the
3 physical market participants.

4 Q. Well, let -- so have you -- have you done any
5 calculation to determine -- strike that.

6 In Example 1, that's National Milk Producers
7 Federation, correct?

8 A. We -- we pulled that example from --

9 Q. Okay. And under their own proposal, the
10 Make Allowance would go up to \$0.24 from 20.03 cents,
11 correct?

12 A. Yes.

13 Q. And so have you -- have you done any calculation
14 as to what that implies is the dollar amount by which the
15 Make Allowances currently in effect are failing to reflect
16 actual cost of manufacturer?

17 A. That's outside of our scope of what we --

18 (Court Reporter clarification.)

19 THE WITNESS: Of what we intend to testify on.

20 BY MR. ROSENBAUM:

21 Q. I mean, if I were to tell you that simply using
22 National Milk's proposal and looking at how much milk is
23 pooled in the Federal Order system for Class III products,
24 it would suggest that the Make Allowances are understating
25 cost of manufacture by \$600 million a year?

26 MR. HILL: Your Honor --

27 THE COURT: Yes.

28 MR. HILL: -- I'm going to object here. I think



1 this witness has said over and over again at this point
2 that she's not intending to testify on those matters. She
3 came in for a specific testimony, and I think this is
4 outside of it. She's asked and answered this question.

5 THE COURT: Sustained.

6 Go on, Mr. Rosenbaum, you want to say something on
7 that before -- I'll withdraw that ruling. I'll hear what
8 you have to say, Mr. Rosenbaum.

9 MR. ROSENBAUM: Sorry -- I'm sorry, I didn't hear
10 that last part?

11 THE COURT: I'll let you respond to Mr. Hill's
12 objection that this is beyond the witness's testimony.

13 BY MR. ROSENBAUM:

14 Q. Let me ask -- let me ask it a different way.
15 You -- am I correct you -- you have not made any effort to
16 determine whether or to what extent delaying
17 implementation of the new milk order regulations by a
18 year, what impact that would have on -- on dairy
19 processors?

20 A. That's -- I would decide not to answer that. I
21 think we -- we don't intend to testify on those matters.

22 MR. ROSENBAUM: That's all I have.

23 THE COURT: Thank you, Counsel.

24 And the objection was sustained.

25 Mr. English has follow-up. Should we take you now
26 or did someone else stand to -- all right, let's take you,
27 Mr. English.

28 CROSS-EXAMINATION



1 BY MR. ENGLISH:

2 Q. So just a couple more questions. I appreciate it.
3 It's just something that I didn't quite get to.

4 So I talked about the hedgers, correct?

5 A. Yes.

6 Q. So let's talk about -- a minute about the market
7 makers.

8 This is, for want of a better phrase, a known
9 unknown, correct?

10 A. It -- it's -- there's regulatory risk associated
11 with this.

12 Q. And everybody knows that there's an unknown risk
13 of what's going to happen, correct?

14 A. You could say that about any market. There's
15 unknown --

16 Q. Exactly. You can say that about any market.

17 Isn't that exactly what market makers want, they
18 want those kinds of things in order to be able to assess
19 risk?

20 A. I think I would point back to the example of, you
21 know, we have used some of the changes discussed as
22 material changes to the contract. And while, yes, there
23 is risk market makers take on when they are, you know,
24 entering and taking the other side of that trade, there's
25 still stability in the underlying assumptions that they
26 are making when making those trades and when taking on
27 that risk.

28 And I think there's an unprecedented amount of



1 uncertainty in, you know, whether -- without knowing the
2 formulas, without knowing that price relationship that
3 they are taking on. And we -- we have been hearing
4 anecdotally that they are -- they are maybe less willing
5 to do that moving forward if it's going to be -- continue
6 to be an additional unprecedented level of regulatory
7 risk.

8 Q. And part of that uncertainty is not knowing when
9 it will be implemented, correct?

10 A. Correct.

11 MR. ENGLISH: Thank you.

12 CROSS-EXAMINATION

13 BY MR. VETNE:

14 Q. Good morning. My name is John Vetne, V-E-T-N-E,
15 representing National All-Jersey.

16 The risk management programs that you provide
17 allow traders to project, as they desire, about changes in
18 value based on market data such as your cheese options
19 that's based on market information, correct?

20 A. What is based on market -- can you repeat the
21 question in a different way?

22 Q. The cheese options that you provide, for example,
23 cheese futures, are based on anticipated future prices of
24 cheddar cheese in 40-pound blocks and 500-pound barrels,
25 correct?

26 A. The forward curve can be seen as anticipation of
27 where the market's going to go, but the final settlement
28 is based on the USDA published prices for those -- for



1 those products.

2 Q. The USDA published prices are based on the survey
3 of market information?

4 A. Yes.

5 Q. Okay. Do you expect to see any -- any change
6 in -- in that product if 500-pound barrels are eliminated
7 from the regulatory formula?

8 A. I wouldn't speculate on -- on the actual impact to
9 price, but I think we do view it could be a material
10 change to the contract.

11 Q. I'm sorry. Could you keep your voice up?

12 A. We --

13 Q. You're fading out.

14 A. I wouldn't -- I wouldn't speculate on the specific
15 impact to price, but I do think we believe that could be a
16 material change to the cheese contract, yes.

17 Q. Okay. You could only continue to offer that
18 product, for example, if 500-pound barrel prices continue
19 to be announced, even though they might not be part of the
20 formula?

21 A. Our -- our current rule book language states that
22 it settles to the USDA non-monthly weighted average price
23 for cheddar cheese, so it -- it does settle to the USDA
24 announced price for cheese, which if -- if they made a
25 change, that potentially would be reflected in the
26 contract as well.

27 Q. If they made a change in the products reported; is
28 that correct?



1 A. So if -- if USDA whatever -- you know, if they
2 change the survey methodology that feeds into that monthly
3 weighted price, our contracts will continue to settle to
4 the monthly weighted price.

5 Q. Okay. The survey methodology for reporting market
6 prices for cheese; is that what you are referring to?

7 A. Yes. For -- for the -- if there's a change to how
8 USDA calculates those weekly prices that feed into the
9 monthly price, that would -- that would all factor into
10 the cheese contract, yes.

11 Q. Okay. As long as that continues to be reported,
12 assuming the same survey price process, would it matter to
13 that contract if 500-pound blocks were removed from the
14 Federal Milk Marketing Order price calculation?

15 A. I wouldn't take a position on whether it would
16 matter or not. I just want to make sure you are aware
17 that we would consider it a material change, but I
18 wouldn't take a position one way or the other.

19 Q. Does not take a position mean you don't know?

20 A. I -- I defer -- I -- it's not our place to take a
21 position on that change.

22 Q. Okay. The Class III and Class IV futures are
23 based on reports of regulatory data as distinguished from
24 market price. Do you understand I use market price in
25 prior questions, reported cheese prices in the market as
26 reported by USDA?

27 A. Uh-huh.

28 Q. Class III and IV prices are not market prices,



1 they are regulatory data, correct?

2 A. I -- I wouldn't specify how -- how those are
3 determined.

4 Q. Okay. Let's go -- people love your Figure 5.
5 I'll go there, too.

6 When you use -- in this middle of the figure, you
7 use the term change in value to average 2022 futures
8 equivalent open interest.

9 So is that all of the open interest contracts for
10 calendar year 2022?

11 A. No. That's -- that's on average throughout the
12 year on a daily basis.

13 Q. It's the average for the entire calendar year?

14 A. The average for calendar year 2022 of futures
15 equivalent to futures and delta weighted options open
16 interest.

17 Q. So, by average --

18 A. On a daily basis.

19 Q. On a daily basis, so -- okay, at any time.

20 And when you go down further to change in value to
21 average, is that a representation of what would happen to
22 the value of those future contracts if there were an
23 immediate change --

24 A. No.

25 Q. -- of the Make Allowance?

26 A. It actually -- it doesn't necessarily take into
27 account when the change is made. It is just when that
28 change was made that next day, yes, this would -- this



1 would be the impact on the average settlement.

2 Q. Okay. So you have an existing settlement price,
3 and if the next day it changed, here's how all of those
4 contracts would be affected?

5 A. Yes.

6 Q. And therefore, if all of the data going down --
7 except for change in value. If there were a 12-month or
8 15-month or a 24-month lag, you would anticipate the
9 change in value would be zero; am I correct?

10 A. I don't know if it's fair to say that. I wouldn't
11 want to speculate on undeferred. But market participants
12 would then be not entering in -- if they had advanced
13 notice of when those changes were going to happen --

14 Q. Yes.

15 A. -- they would then be pricing that information and
16 taking that into account when they are entering into
17 positions.

18 Q. And at some point, if there was enough lag between
19 the announcement or knowledge of a change, if it's beyond
20 all open interest, the impact is zero?

21 A. Yes.

22 Q. Ms. Hancock asked you some questions about market
23 disruption and the frequency of change of prices, and she
24 used the word market disruption.

25 Did you understand her use of that word, and in
26 your answer did you intend to mean market disruption in
27 the risk management market, the futures market?

28 A. I'm thinking back. I believe that's how I



1 interpreted it, yes.

2 Q. Okay. And you did not intend to suggest a market
3 disruption in the milk market, for example?

4 A. I was focused on the futures market, yes.

5 Q. On the futures market. Okay.

6 And am I correct that if there is enough notice,
7 enough lag between a regulatory change and its
8 implementation, that the market disruption is reduced --
9 could be zero, if it was enough lag, whether it's changed
10 every year or every three years or every five years? With
11 enough lag, the disruption would be the same, it's how
12 much the lag is?

13 A. I think it depends on the type of change you are
14 talking about and the market information available and the
15 notice given. So I -- I don't know that I'd generalize.
16 I think it depends but --

17 Q. It depends on the lag between the notice and its
18 implementation in all cases, correct?

19 A. Yes. That would be a factor, yeah.

20 Q. Did I understand you to say that going beyond your
21 written testimony that the open interest beyond 12 months
22 currently in the month of August 2023 has reduced by 50%
23 or more?

24 A. Versus 20- -- versus 2022, yes. So average open
25 interest over 360 days for August of 2023 was around 4800
26 contracts, and for 2022 it was about 10,400 contracts. So
27 a roughly 54% drop versus the five-year average it is
28 roughly a 36% drop.



1 Q. So you are inferring that participants in risk
2 management are already factoring in the uncertainty of
3 this proceeding?

4 A. It's -- it's a possibility. I can't say with 100%
5 certainty that's what it is. But we wanted to point out
6 that there is a reduction in -- we're hearing anecdotally
7 that there is some reluctance to put on those deferred
8 positions.

9 Q. Okay. Concerning market knowledge, market
10 information, and lag time, Mr. English asked you some
11 questions. Apparently there has been some possible market
12 response by virtue of the proposal and this hearing. The
13 next step procedurally by USDA would be a recommended
14 decision.

15 Would that be another opportunity for the market
16 to respond in its risk management on the CME?

17 A. In terms of pricing and what -- what that new
18 decision would be, or what do you mean by that?

19 Q. In terms of you have indicated there has been a
20 response in open interest beyond 12 months.

21 Would you anticipate that market participants in
22 risk management would factor in a recommended decision in
23 their risk management planning, whenever that occurs?

24 A. I think they will take into account the
25 information that's available when trading in the market.

26 Q. And that would be additional information, correct?

27 A. Once a decision is issued, yes.

28 Q. Yes.



1 And then there will be some briefing and
2 exceptions, and then there will be a final decision,
3 another time at which market participants could factor in
4 new information?

5 A. There's new information, yes. But if -- but if
6 that uncertainty remains until the final decision, we can
7 likely still see a pullback in the willingness to put on
8 positions.

9 Q. Okay. And then following that, there would be a
10 final decision, another opportunity to factor in
11 information, reducing uncertainty, correct?

12 A. There would be additional information, yes.

13 Q. Okay. And following that, are you aware that
14 there would be a referendum with producers?

15 A. As I understand, yes.

16 Q. And then final implementation -- final
17 effectiveness of a rule, another time period in which
18 there would be additional information, correct? First day
19 of an effective rule?

20 A. I -- I'm not -- I don't have that process in front
21 of me, but I believe you, yeah.

22 Q. Okay. And then depending on what that rule says,
23 if there is a lag time built-in or not.

24 So the first indication the market would get on
25 whether there is a built-in lag would be in a recommended
26 decision?

27 A. It may be an indication, but there's still
28 uncertainty and, you know, decisions could land either



1 way, so there's --

2 Q. The uncertainty would, in part, reflect whether
3 USDA has a pattern of following its recommended decision
4 into the final decision or making significant changes.

5 A. I wouldn't speak to that.

6 Q. You don't know. Okay.

7 Could you give me a really simplified fourth grade
8 explanation of the difference between a future and an
9 option?

10 A. Sure. Yeah. A futures contract is -- is -- I
11 refer back to my definition, but you are actually entering
12 into a contract to buy or sell an asset or an underlying
13 reference at a future point in time. And the options
14 contract is just the right but not the obligation to do
15 that.

16 Q. How is that different?

17 A. Options -- so futures are -- you know, they are --
18 if you are carrying that position all the way to
19 expiration, you are automatically getting settled against.
20 An option, you have the right, but people don't always
21 exercise those positions.

22 Q. Under the option, you can if you want to, but you
23 don't have to?

24 A. Yes.

25 Q. Got it.

26 MR. VETNE: Thank you,

27 ///

28 ///



1 CROSS-EXAMINATION

2 BY MR. MILTNER:

3 Q. Good morning. My name is Ryan Miltner. I
4 represent Select Milk Producers.

5 A. Okay.

6 Q. Many of the topics I was going to ask about have
7 been covered. So if I pause, it's because I'm skipping
8 over things that I don't want to duplicate or make you
9 duplicate. Okay?

10 A. Yes.

11 Q. There was some talk about the -- this Federal
12 Order process and the time it takes to get from a hearing
13 to a final decision. We went through this in some detail
14 on Friday with Dr. Bozic. But we kind of landed on a
15 recommended decision, if one were to come, sometime around
16 April 15th of 2024, and a final decision August -- I'm
17 sorry -- October 1 of 2024.18 So let's just assume that that's going to be the
19 case. Is that all right?20 A. I -- I am not going to say that we're -- I'm not
21 taking a position on that as a proposed.22 Q. No, I'm not asking you to take a position. I'm
23 saying can we assume that for these questions?

24 A. Sure.

25 Q. Okay. So between April and October, we have got
26 six months or so. And if I'm -- as I look at your
27 testimony, and Figure 3 in particular, I think that means
28 that between the recommended decision and a final

1 decision, that 75% of the open interest would have closed
2 out during that window; is that right?

3 A. We still view that uncertainty as remaining until
4 that final decision.

5 Q. Okay. Wouldn't, however, the market participants,
6 once the recommended decision comes out, begin to price
7 that risk in?

8 A. Market participants will take into account the
9 information they have, but from our standpoint and how we
10 normally would approach a material change, that
11 uncertainty still remains until the final decision is
12 issued.

13 Q. I want to ask about the material changes that you
14 referenced in your testimony with respect to cattle
15 futures and wheat futures.

16 Those particular changes -- and, again, I'm not an
17 expert on the CME -- but those were triggered by changes
18 in the contract definition for those commodities, correct?

19 A. They were triggered by a need from the physical
20 industry to update the contracts to reflect -- to reflect
21 the dynamics in the industry. But when you say triggered,
22 you mean the contract changes that actually happened?

23 Q. Yes.

24 A. There would have been a change to rule book
25 language, yeah, to the underlying contract specifications.

26 Q. And the industry -- those -- the industries
27 affected by those commodities approached the CME and asked
28 for changes to the underlying contract structure or



1 definitions?

2 A. Whether they approached us or it was ongoing
3 engagement from us with them as a regular course of
4 business.

5 Q. It wasn't triggered by governmental action or
6 regulatory change, was it?

7 A. Not to my knowledge. I wasn't directly involved
8 with both of those changes but --

9 Q. The CME trades interest rate futures and options,
10 correct?

11 A. Yes.

12 Q. There's no delay or change to those contracts if
13 the Fed changes the interest rates, is there?

14 A. I -- I don't cover those products, and I wouldn't
15 want to speak to those products in this hearing.

16 Q. I think it's either in your statement or in your
17 testimony that most of the dairy futures and options go
18 out 24 months; is that right?

19 A. We list contracts for 24 months out, yes.

20 Q. So right now, I could look at a Class III
21 July 2025 contract, at least it's listed?

22 A. It's available to trade, yes. I -- I don't
23 believe we have open interest out there yet, but it's
24 available.

25 Q. There is open interest in, say, the December 2024
26 Class III contract, though, right?

27 A. Yes.

28 Q. And if our -- if our guesstimate on the end of



1 this hearing or a final decision of October of 2024 is
2 right, that means those market participants are purchasing
3 those contracts or selling those contracts, whichever
4 case, understanding there's this regulatory risk out
5 there, correct?

6 A. I -- I can't speculate whether those individual
7 market participants understand the risk. You know, they
8 have entered into positions, but I can't speculate whether
9 they know.

10 Q. I want to ask a question about Figure 5. Where
11 you state the change to an individual Class III contract
12 under both examples, you are listing that as a negative
13 because it's a -- it's a drop in the value of the
14 underlying contract, right? That was the answer --

15 A. Yes. And I -- I think I acknowledged this
16 earlier, but I would like to acknowledge that there should
17 be a correction to that. It should be Class IV that
18 change -- the 1060 and 1340, that should be for Class IV.

19 Q. Okay. I'll note that. I was actually looking at
20 the one a few rows above, so I was looking at the
21 Class III one.

22 So it's a negative number because the value of the
23 contract drops. But isn't there somebody on the other
24 side of the contract that's going to get the benefit of
25 that price change?

26 A. I don't -- I don't want to speak to the winners
27 and losers in the scenario, just the overall impact to
28 price, and it is a drop in price.



1 Q. Okay. I also want to try to get a little more
2 context around what you describe as a material -- material
3 impact on price. I think you -- in response to a
4 question, you said that the Make Allowance proposals would
5 have a material impact on price.

6 Am I stating that correctly?

7 A. Yes. I -- I think I meant to say would have a
8 material impact on the contract, and we would view an
9 impact on price as a material impact --

10 Q. Okay.

11 A. -- in the contract.

12 Q. So that's great, material impact on the contract.

13 Have you evaluated the three proposals that Select
14 Milk Producers has introduced and determined whether you
15 believe they would have a material impact on the contract?

16 A. We don't have those in front of us, no.

17 Q. They were in the hearing notice. Did you -- and I
18 think you said you looked at the hearing notice. I'm just
19 wondering if you have done the evaluation, that's all.

20 A. I -- I haven't done that specific evaluation, no.

21 Q. Okay. Is there a threshold at some point at which
22 you would decide that any proposal would be material
23 impact on the contract?

24 A. We can't specify a threshold. I think we view it
25 as -- having an impact on price as being a material change
26 to a contract, but I -- I wouldn't get into the specifics
27 of threshold.

28 Q. So of the -- there are 21 different proposals at



1 the hearing, and although they will all be, I guess,
2 evaluated independently by USDA, it's a I would say
3 probability that more than one could be implemented, and
4 so that collection of proposals that would be adopted
5 would have some aggregate impact on prices.

6 Does the -- does the collective impact of
7 proposals have any change on your opinion as to whether
8 there would be a material impact on the contracts?

9 A. If -- if they have a change to the Federal Order
10 formulas themselves and there's a change to those
11 formulas, and thus a change to the underlying assumptions
12 when people are entering into these contracts, I think,
13 yes, we -- we believe that would be a material impact.

14 Q. Okay. My next questions are just to help me
15 understand some of the data here in your statement a bit
16 more.

17 I'm looking at Figure 2. And I appreciate that
18 this is in color because it does help. I'm trying to -- I
19 just want to make sure. There are two different blues in
20 there, maybe three.

21 The blue that's at the bottom of your bar chart,
22 is that Class III milk?

23 A. Yes.

24 Q. The blue that appears -- I'm looking at the 2022
25 column. It appears near the top underneath the gray bar.
26 Is that block cheese?

27 A. No, I believe that's dry whey.

28 Q. Okay. Does block cheese appear in the 2022 chart



1 then, at least to an extent that it's visible?

2 A. It is very difficult to see, so I apologize for
3 that color scheme. It should be, at least in the last
4 three. But it -- it appears to be blending in with the
5 Class III milk.

6 Q. Looking at, say, 2022 of that blue bar, do you
7 have an estimate as to what -- what percentage of that bar
8 might be block cheese versus Class III milk?

9 A. I -- I don't have that estimate. I -- I wouldn't
10 want to speculate on the record. It's -- it is a small
11 proportion of --

12 Q. It's small? Okay.

13 So if the -- if the bottom part of the bar chart
14 is Class III milk, although that -- that volume of
15 contracts has certainly increased over time, from 2008 to
16 2022, it's, I don't know, maybe up 40, 50%.

17 Does that seem about right?

18 A. That looks about right, but I -- I don't want to
19 say that on the record without knowing the number.

20 Q. Mr. English asked you some questions, and he went
21 through kind of both sides of a futures and an options
22 trade. And if I followed the Q&A correctly, the benefit
23 to either party would be the same pre and post any
24 decision out of this hearing.

25 Am I correct there?

26 A. No, I don't think that's fair to say. And I -- I
27 wouldn't want to, again, speculate on -- on the physical
28 side of the market and outcomes to the hearing, no.



1 Q. Okay. Let me ask this. If a decision were to be
2 implemented right away rather than delayed, is the risk
3 really to the people that are trying to manage their --
4 their exposure or is it to the liquidity makers that you
5 reference at the beginning of your statement?

6 A. There's risk to anyone that's entering into a
7 position. If the underlying assumptions within that
8 contract are changing, then there's still risk to --
9 whether you are a hedger or a liquidity provider.

10 Q. Thank you.

11 MR. MILTNER: I don't have any other questions,
12 your Honor.

13 THE COURT: Thank you, Counsel.

14 Any further cross, other than AMS?

15 AMS, I think you are up.

16 MS. TAYLOR: Thank you, your Honor.

17 CROSS-EXAMINATION

18 BY MS. TAYLOR:

19 Q. Good morning, Ms. Crema.

20 A. Good morning.

21 Q. I do -- I do appreciate you coming to testify
22 today. I want to go through your testimony. Get my pages
23 in order again.

24 If we could look at Figure 1 on page 3, there was
25 some talk about one of the proposals is dropping barrels.
26 And, you know, I don't see barrels in this list of
27 products offered.

28 So for the record, could you state which of these



1 products would be impacted if barrels were no longer
2 surveyed in prices released?

3 A. The cash-settled cheese futures and options, I
4 believe could be impacted. Again, I -- I'm not going to
5 speculate on -- on impacts to price but -- and the
6 Class III milk futures and options as well.

7 Q. Okay. And what does cash-settled cheese settle on
8 then?

9 A. It settles to the USDA monthly weighted average
10 price for cheddar cheese.

11 Q. Okay. Thank you.

12 And to follow up to Mr. Miltner's question, if we
13 look at Figure 1 and then at Figure 2 on the following
14 page, it looks like in Figure 1, that second column -- and
15 this data is for 2022, total open interest, for a total of
16 269,000 contracts.

17 Is that the same data that was used on Figure 2
18 for that 2022 line?

19 A. Yes.

20 Q. So in the data -- on Figure 1 it says blocks
21 are -- had 2,071 contracts. So while the blue is kind of
22 hidden in Class III, you could figure out the proportion?

23 A. Yes.

24 Q. Okay. Let's see.

25 On Figure 2, I know you stated there was a -- a
26 slight decrease after we implemented our Make Allowance
27 change back in 2008. I also noted particular jumps --
28 changes between 2010 and 2011, 2013 and 2014, and then



1 2021 and 2022.

2 I was just wondering if you could -- if you had
3 any information as to why there were these sudden jumps.
4 I'm guessing it's some new product that was offered
5 perhaps, which the colors show, but in some cases that
6 isn't the case.

7 A. Well, in 2011, yeah, the cheese contract we did
8 launch. So cash-settled cheese, you can see that green
9 bar. It's tiny, but it's there in 2011. And you do see
10 that picking up as well. The nonfat dry milk also, it's a
11 little bit harder to see, but that launched in 2007. So
12 you see that pick up over the years as well.

13 Q. And then the other one was from 2013 to 2014.

14 A. Yes. For that jump, I -- I wouldn't speculate on
15 record what exactly led to that jump.

16 Q. Okay.

17 A. I don't have that context.

18 Q. Okay. Okay.

19 In Figure 3, this average open interest
20 distribution, in this -- does this reflect all seven
21 products that the CME offers?

22 A. It does.

23 Q. Okay. And -- and am I correct -- and this might
24 be kind of an elementary school question for risk
25 management, at least, I'm not sure my kids learned about
26 this in elementary school -- but open interest covered,
27 does that mean that there is a contract, and there's a
28 buyer and seller at both ends, but the contract hasn't



1 matured yet, so it is still kind of open waiting for the
2 end date?

3 A. This is looking at a percentage of our open
4 interest that existed on average and the percent of that
5 open interest that resided within three months or six
6 months or nine months. And, again, that's -- that's an
7 estimated month equivalent, because they are bucketed
8 based on days to expiration.

9 Q. Okay. So if I read through -- and I think you did
10 go through this earlier, but sometimes I need to go
11 through it in my own head.

12 At the six-month line, does that mean that 75% of
13 the contracts at that point, on any given day, close
14 within six months?

15 A. Yes. On average, between 2018 and 2022, as much
16 as 75% of that open interest were contracts that would
17 expire within six months.

18 Q. Okay. On page 6, on the third full paragraph, you
19 talk about when a -- well, first, a question.

20 We talked -- there's been a lot of questions on
21 material changes. Does CME make that determination?
22 There's some discussion in that page too about the role
23 CFTC plays. Do -- so I'm just trying to understand who
24 makes the determination that it's a material change, and
25 does CFTC have to approve that or they just kind of
26 oversee?

27 A. For -- for typical changes it's a conversation
28 with our regulator where there's, you know, dialogue



1 around what would be considered a material change.

2 Q. Okay. So that's not necessarily just CME making
3 that determination independently?

4 A. Not for changes like we have discussed, you know,
5 these examples.

6 Q. Okay. And how long does it take to do that kind
7 of review and make that determination?

8 A. It -- it really depends on the contract change,
9 and there, you know, can be industry engagement around
10 that, both from us and from the commission. So I think
11 it -- it depends.

12 Q. Okay. And you talk about your material changes
13 are either applied on contracts without any open interest
14 or communicated to market participants with sufficient
15 notice.

16 So I was wondering if you could talk about how are
17 things communicated and what you mean by -- would define a
18 sufficient notice.

19 A. So in terms of how we would communicate a change,
20 you know, once a decision is made to make a change, we put
21 out generally -- we file with the commission, we put out a
22 submission, and then we also put out special executive
23 reports where it's basically a notice to the trade that a
24 change is coming and -- and the implementation windows
25 that -- you know, whatever contract month that change will
26 be effective on.

27 So that -- that's typically -- and there's other,
28 you know, direct communication, but certainly filing with



1 a regulator and then putting out broad notices to the
2 trade are how we communicate.

3 And can you repeat the other part of your
4 question?

5 Q. So you say it's done with sufficient notice, and I
6 was just wondering if you could define what that means.

7 A. I can't necessarily define -- I think it's
8 situational depending on whatever contract you are talking
9 about and what the change is. You know, sometimes, like
10 in the examples I mentioned, it's changes that are going
11 out past open interest, if they are deemed to be material
12 changes. Other times it's something that might not, you
13 know, be a material impact on price, and those -- those --
14 you know, that -- that window can vary depending on what
15 the change is.

16 Q. Okay. Hold on one second.

17 So on your Figure 5, when you talk about overall
18 impact, and I just want to make sure it's clear. When --
19 for me, for everyone, the record. So when people enter
20 into a contract and the assumptions are known at that
21 point, and then halfway through the assumptions change,
22 that contract cannot change.

23 So is it correct, that contract can't change?

24 A. You mean if it's a contract that's already listed?

25 Q. Yeah.

26 A. Generally, yeah, the contract wouldn't change.

27 Q. So whoever has that contract is kind of -- if
28 there is -- say the Federal Orders make a change to the



1 price formulas and the implementation is, you know,
2 shorter than what has been discussed here. The person
3 that has that -- the people that have that contract are
4 kind of stuck with it, right, and so they have to settle
5 it, whatever those terms are at the end, even though the
6 prices might not reflect that?

7 A. They would be subject to that risk, yes.

8 Q. Yeah.

9 There was some discussion on Friday, someone was
10 here to discuss some other risk management tools. And I
11 wanted to follow up on some of that and ask, is the --
12 does the CME -- you know, do you all as an entity assume
13 any financial or legal risk? You know, if there's a new
14 policy, Federal Order changes that -- or is it just all --
15 all that risk is assumed by market participants?

16 A. I -- I wouldn't want to speak specifically to our
17 legal risk in this scenario.

18 Q. Okay.

19 MS. TAYLOR: I think that's all we have. Thank
20 you so much.

21 THE COURT: Mr. Rosenbaum, do you have some
22 re-cross?

23 MR. ROSENBAUM: I do, your Honor.

24 RE-CROSS-EXAMINATION

25 BY MR. ROSENBAUM:

26 Q. I just want to follow up on a line of questioning
27 from USDA, if you would turn back to page 6 of -- here in
28 Exhibit 78, your testimony.



1 And you had a paragraph there about how "CME Group
2 routinely files changes to contract specifications that
3 are subject to Commodity Futures Trading Commission
4 review, which may be due to changes in the underlying
5 commodities or to maintain compliance with the core
6 principles set by the Commodity Exchange Act and CFTC
7 regulations."

8 So my question is this: Which of the proposals,
9 if at all, would trigger such a review?

10 A. I -- I don't know that I want to say in this
11 moment what would trigger that review. I think this --
12 this hearing in general is -- is I think we view it as
13 part of the discussion of ongoing review of the contract
14 and engagement with the industry. But I -- I don't know
15 that I would speak specifically to each individual
16 proposal and whether it triggers that.

17 Q. Or -- or -- I'm focusing specifically on which
18 proposals would trigger the obligation for the CFTC to
19 make a review.

20 Do you have any opinion as to whether any of them
21 actually would trigger that?

22 A. I -- I don't have an opinion to state on that at
23 this point.

24 MR. ROSENBAUM: Thank you.

25 THE COURT: Yes? Re-cross?

26 Is it something having to do with something that
27 came up in the previous --

28 DR. CRYAN: I apologize. I did not -- this is --



1 this is something -- maybe is tangentially related. Is it
2 okay if I ask a question?

3 THE COURT: Any objection?

4 Seeing none.

5 DR. CRYAN: Thank you. Thank you.

6 (Court Reporter clarification.)

7 DR. CRYAN: Oh, I'm sorry, my name is Roger Cryan,
8 C-R-Y-A-N. I'm with the American Farm Bureau Federation.

9 CROSS-EXAMINATION

10 BY DR. CRYAN:

11 Q. When USDA made a change -- when Congress made a
12 change to the Class I price formula, it was in order to
13 accommodate risk management by fluid processors so they
14 could use the Class III and the Class IV contracts that
15 exist to manage their risk on the Class I price in ways
16 that they -- that were difficult to do with the higher-of.

17 You have added contracts in the past. You have
18 added the block contract. Is it not a possibility to add
19 a Class I futures contract?

20 A. We're always open to engagement with the industry
21 on -- on additional tools to suit the industry's needs.
22 You know, I'm not going to speculate anything out of this
23 hearing, but in general, we're always open to feedback if
24 there are additional tools needed to manage risk.

25 DR. CRYAN: Very good. Thank you very much.

26 THE COURT: Anything further?

27 So on my on motion, offer exhibit marked for
28 identification 78 into the record.



1 MS. TAYLOR: Yes, your Honor. Thank you.

2 THE COURT: Seeing no objections, Exhibit 78 is
3 now made a part of the record.

4 (Thereafter, Exhibit Number 78 was
5 received into evidence.)

6 THE COURT: Thank you, Ms. Krema. You may step
7 down.

8 We'll take a break. Ten minutes, be back at
9 10:30.

10 (Whereupon, a break was taken.)

11 THE COURT: Back on the record.

12 Your witness, Ms. Hancock.

13 MS. HANCOCK: Thank you, your Honor.

14 DIRECT EXAMINATION

15 BY MS. HANCOCK:

16 Q. Good morning, Mr. Kootstra. Would you mind
17 stating and spelling your name for the court reporter?

18 A. Sure. My name is Leland Kootstra. First name is
19 spelled L-E-L-A-N-D. Last name is spelled
20 K-O-O-T-S-T-R-A.

21 Q. And where are you employed?

22 A. I work at Frazer, LLP, in Visalia, California.

23 Q. Would you mind providing your mailing address?

24 A. 2250 West Main Street, Visalia, California, 93291.

25 Q. And did you prepare a written statement in
26 preparation for your testimony today?

27 A. I did.

28 Q. And is that what we have identified as Exhibit



1 NMPF-25?

2 A. Yes.

3 Q. And did you also prepare some exhibits to support
4 and provide the backup information for your testimony?

5 A. Yes, I did.

6 Q. And --

7 MS. HANCOCK: Well, maybe we do this first. If we
8 can have an exhibit number assigned for NMPF-25?

9 THE COURT: Yes, I have 79.

10 MR. HILL: Correct.

11 THE COURT: Exhibit NMPF-25 is marked for
12 identification as Hearing Exhibit Number 79.

13 (Thereafter, Exhibit Number 79 was marked for
14 identification.)

15 BY MS. HANCOCK:

16 Q. Okay. And then what we have previously identified
17 as Exhibit NMPF-25A is titled Dairy Farm Operating Trends,
18 December 31st of 2009.

19 Is that one of the exhibits that you prepared in
20 support of your testimony?

21 A. That's correct, yes.

22 Q. Okay.

23 MS. HANCOCK: And can we mark NMPF-25A as a -- for
24 identification as Exhibit 80, your Honor.

25 THE COURT: So marked.

26 (Thereafter, Exhibit Number 80 was marked
27 for identification.)

28 BY MS. HANCOCK:



1 Q. And if -- you also prepared NMPF-25B titled Dairy
2 Farm Operating Trends, December 31st of 2014?

3 A. Yes.

4 MS. HANCOCK: Your Honor, if we could mark that
5 for identification purposes as Exhibit 81.

6 THE COURT: So identified.

7 (Thereafter, Exhibit Number 81 was marked
8 for identification.)

9 BY MS. HANCOCK:

10 Q. You prepared what we have identified as Exhibit
11 NMPF-25C titled Dairy Farm Operating Trends, December 31st
12 of 2015?

13 A. Correct.

14 MS. HANCOCK: Your Honor, if we could mark that
15 for identification purposes as Exhibit 82.

16 THE COURT: So marked for identification.

17 (Thereafter, Exhibit Number 82 was marked
18 for identification.)

19 BY MS. HANCOCK:

20 Q. We have what we have identified as Exhibit
21 NMPF-25D, as in David, titled Dairy Farm Operating Trends,
22 December 31st, 2020. Did you prepare that as well?

23 A. Yes.

24 MS. HANCOCK: Your Honor, if we could have that
25 marked for identification purposes as Exhibit 83.

26 THE COURT: So marked for identification.

27 (Thereafter, Exhibit Number 83 was marked
28 for identification.)



1 BY MS. HANCOCK:

2 Q. And finally, your exhibit identified as Exhibit
3 NMPF-25E titled Dairy Farm Operating Trends, December 31st
4 of 2022. Did you prepare that as well?

5 A. Yes.

6 MS. HANCOCK: And, your Honor, if we could have
7 that marked for identification purposes as Exhibit 84.

8 THE COURT: So marked.

9 (Thereafter, Exhibit Number 84 was marked
10 for identification.)

11 BY MS. HANCOCK:

12 Q. Mr. Kootstra, before we have you read your
13 testimony into the record, would you mind providing us
14 with an overview of your background and education?

15 A. Sure. I graduated from Point Loma Nazarene
16 University with a Bachelor of Science in accounting. I'm
17 a partner at Frazer, LLP. We are an accounting and
18 consulting firm, headquartered in California, and we work
19 with several hundred dairy clients throughout the United
20 States.

21 Q. And what falls within the scope of the work that
22 you do at Frazer, LLP?

23 A. So in addition to the traditional tax and
24 assurance type work, we also do a significant amount of
25 estate planning, transactional support, lender
26 negotiation, bankruptcy support, and preparation of
27 feasibility studies, and other consulting type projects.

28 Q. When you say "feasibility studies," what kind of



1 feasibility studies have you been involved in?

2 A. A number of them, probably the largest of which
3 was a feasibility study for the University of Idaho and
4 their research dairy facility.

5 Q. What was the subject or scope of the feasibility
6 study that you did for the University of Idaho?

7 A. That was a Greenfield Dairy Facility and Research
8 Center. That was contemplated, and over several
9 iterations, we were able to help them kind of put together
10 a sustainable model, and that has now broken ground.

11 Q. Okay. And what was the -- how long had you been
12 working on that project for the University of Idaho?

13 A. So our firm was originally engaged on that back
14 in, I want to say 2015 or thereabouts, and then I started
15 working on that after I joined the firm in 2011.

16 Q. You said they were originally engaged in 2015?

17 A. 2005, sorry.

18 Q. Oh, okay. I thought my timing was a little off
19 there.

20 So your firm had been engaged in 2005 with the
21 University of Idaho to provide that feasibility study, and
22 then you started working on the project when you joined
23 your firm in 2011?

24 A. Correct.

25 Q. Okay. What year did you obtain your Bachelor's
26 degree?

27 A. 2011.

28 Q. Okay. And the customer base or the client base



1 with whom you work, is that mostly from the producers'
2 side?

3 A. I do work with both producers and processors, but
4 the vast majority of my clients are producers.

5 Q. Could you provide a percentage estimate of how
6 many are producers versus processors?

7 A. I would say upwards of 75% are producers.

8 MS. HANCOCK: Your Honor, I would offer
9 Mr. Kootstra as an expert in providing accounting and
10 financial advice services to the dairy industry.

11 THE COURT: Any objections?

12 Based on voir dire, I find this witness qualified
13 to testify as an expert on those subject matters.

14 BY MS. HANCOCK:

15 Q. Mr. Kootstra, would you mind reading your
16 statement into the record, please?

17 A. Yes.

18 Good morning. My name is Leland Kootstra, and I'm
19 a partner at Frazer, LLP, a full service accounting and
20 consulting firm. We work closely with hundreds of dairy
21 producers across the United States with a heavy focus on
22 providing consulting services to these producers.

23 Founded in Chicago in 1917, Frazer, LLP, expanded
24 throughout the Midwest and eastern United States. During
25 the 1950s, we began working closely with dairy producers,
26 finding our niche in this industry. Following the
27 westward movement of many producers, we opened offices in
28 California, where we are headquartered today.



1 We serve over 200 dairy producers across more than
2 20 states, and I am proud to say that my office is in
3 Tulare County, the nation's leading milk-producing county.
4 We continually strive to be our client's most trusted
5 advisor, offering services ranging from traditional tax
6 and assurance work to lender negotiation, estate planning,
7 and transactional support services.

8 I joined Frazer in late 2011 after graduating from
9 Point Loma Nazarene University with a Bachelor of Science
10 degree in accounting. Immersed in the dairy industry, I
11 quickly developed an appreciation for the incredible work
12 that goes into producing and supplying high quality milk
13 products to the world. My experience includes working
14 closely with many producers and processing companies in
15 navigating challenging business cycles, exploring new
16 opportunities, evaluating risk, and developing business
17 models.

18 Today, I have been asked by the National Milk
19 Producers Federation to provide an overview of our Dairy
20 Farm Operating Trends Report, including the information
21 contained therein, and to answer any questions you may
22 have.

23 The Dairy Farm Operating Trends Report is a
24 resource provided by Frazer to our clients, lending
25 institutions, and the larger dairy industry. Available
26 for free on our website, this report is organized by
27 geographic regions in the United States and presents
28 financial performance for the year presented.



1 The most recent report with the balance sheet date
2 of December 31, 2022, presents operations across eight
3 regions, including Southern California, the San Joaquin
4 Valley, Kern County, Arizona, Idaho, New Mexico, the
5 Panhandle, and the Pacific Northwest.

6 The contents of the report are prepared using
7 client data from compiled, reviewed, and audited financial
8 statements, prepared and in accordance with generally
9 accepted accounting principles, or GAAP.

10 To protect clients and ensure the report's
11 reliability, all personal and identifying data is
12 anonymized. We carefully select representative clients or
13 dairies for inclusion, excluding those undergoing
14 significant changes or transitions that could materially
15 impact the report's usefulness.

16 For more than two decades, Frazer, LLP, has
17 prepared the Dairy Farms Operating Trends Report,
18 assisting dairy producers and lenders in evaluating
19 specific herd performance. However, it is essential to
20 recognize that the data presented may not be exhaustive or
21 inclusive of all dairy business models.

22 For instance, the report mainly represents larger
23 scale dairies in the western United States. A dairy
24 producer located in Florida, for example, would be better
25 served to compare their operations to a benchmark study
26 more heavily focused on the Southeast.

27 The report presents financial results and metrics
28 in multiple ways, explaining trends within the report.



1 When examining several iterations, readers can identify
2 significant trends and the impacts of changing economic
3 environments on financial performance.

4 I have included a snapshot of the financial
5 performance for a dairy operation in the Panhandle during
6 four significant years in the dairy industry: 2009, 2014,
7 2020, and 2022.

8 In 2009, the net income per head was a negative
9 \$799. Feed cost per head was \$1,920. Milk production per
10 cow per day was 61.8 pounds. Herd turnover rate was
11 29.3%. Cost of replacements, \$1,448. Milk sales per
12 hundredweight, \$13.63. Feed cost per hundredweight,
13 \$9.09. Labor cost per hundredweight, \$1.65. Herd
14 replacement cost per hundredweight, \$1.90. Interest
15 expense per hundredweight, \$0.65. Current ratio, .59 to
16 1. Debt per cow was not measured in that year. Total
17 debt per cow, \$1,831. Debt to equity ratio, 4.01 to 1.
18 Return on total assets was a negative 15.2%. Income -- or
19 loss per hundredweight in the year was \$3.73. And the
20 loss per milking cow per month was \$61.10.

21 In 2014, the net income per head was \$1,250. Feed
22 cost per head, \$2,313.

23 Q. Mr. Kootstra, I'll just save you the trouble --

24 A. Okay.

25 Q. -- of reading the table because it's in the
26 record.

27 A. Thank you.

28 Q. So you are welcome to move on from that.



1 A. These years stand out for various reasons:

2 In 2009, most dairies in the United States
3 incurred losses due to depressed milk crisis;

4 In 2014, producers enjoyed profitability due to
5 high milk prices and comparatively low feed prices;

6 2020, mixed results were seen with the Panhandle
7 experiencing a profitable year while other regions faced
8 losses. Class III and Class IV milk prices, historically
9 close to parity, saw a spread of more than \$10 per
10 hundredweight at points during the year;

11 2020 (sic), the industry enjoyed historically high
12 milk prices, but also endured historically high feed
13 prices as well.

14 I highlight these years to underline key aspects
15 related to the profitability and feasibility of dairy
16 operations, especially in the context of the proposed
17 price changes. While the milk price is undeniably the
18 most significant contributor to top line revenue for
19 dairies, it's far from the only influential factor.

20 For instance, feed cost, comprising over 60% of a
21 dairy's cost structure, have seen remarkable fluctuations
22 in recent years. These variations stem not only from
23 supply chain challenges but also from political conflicts,
24 weather patterns, and other external conditions.

25 Dairies have often absorbed the impact of
26 inflation, interest rate increases, and the rising costs
27 associated with labor and environmental regulations.

28 Concurrently, consumer demand for more sustainable, safe,



1 and quality products has put additional pressure on the
2 industry. While this has led to enhanced efficiency and
3 improvements in dairy operations, it has also incurred
4 substantial costs and required significant investments.

5 As reflected in the table above, this complex
6 scenario extends beyond mere annual income statement
7 performance. It reveals an increase in the average debt
8 held by a producer per cow, encompassing both operating
9 and other debt, often related to facilities and real
10 estate.

11 Specifically, from 2009 to 2022, the average debt
12 per cow more than doubled, a trend consistent across
13 regions, not just in the Panhandle. This increase in debt
14 illustrates that while dairy producers have invested
15 immense time, energy, and resources to elevate operations
16 and herd performance, this growth has predominantly been
17 debt driven. With the recent surge in interest rates over
18 the past 18 months, this debt accumulation adds a
19 substantial additional burden to the cost of dairy
20 production.

21 Dairy producers are predominantly price takers,
22 meaning that although they -- they have access to some
23 risk management tools, they typically cannot set their
24 milk price based on their production costs. This leaves
25 them vulnerable to the volatility of the commodity market.

26 The dairy industry has seen periods of both
27 healthy and negative margins, even as operations have
28 remained relatively consistent. As outlined in the Dairy



1 Operating Trends Reports, the average financial statement
2 margin per hundredweight produced over the past decade is
3 less than \$1, or approximately 4 to 7% of the average milk
4 price during the time. With the ongoing rise in costs,
5 the milk price necessary to maintain a positive and
6 financially sustainable margin must support these
7 additional costs. If it fails to do so, we can expect
8 continued and significant consolidation within the
9 industry.

10 As we contemplate changes to Make Allowances and
11 the Class I mover pricing mechanisms, it is essential to
12 understand the delicate balance of costs, revenues, and
13 market forces that shape dairy operations. Any overly
14 aggressive reduction in milk price could have long-term,
15 irreparable effect on many dairy producers' financial
16 performance or financial positions, expediting
17 consolidation of the industry.

18 I implore you to evaluate the impact on dairy
19 producers carefully, recognizing the critical role that
20 dairy producers play in our economy, their communities,
21 and our daily lives. Thank you.

22 Q. Thank you, Mr. Kootstra.

23 First off, when you refer to Panhandle, what are
24 you referring to?

25 A. It's the region of Northern Texas, Oklahoma.

26 Q. Why did you use that region as your -- as your
27 sample here?

28 A. Within the reports, that -- that was the region



1 that had most consistency as far as the number of
2 producers in the group. California, for example, makes up
3 a large part of the reports, but those farms were not
4 within the Federal Milk Marketing Order for the majority
5 of those years.

6 Q. Okay. And when we look at the chart that you have
7 on page 2, it's fair to say that it looks like there's
8 some volatility there with respect to the net income; is
9 that fair?

10 A. Yes.

11 Q. Is 2009, that point -- so you said that it was a
12 negative net income of 799 per head.

13 Is that an outlier for anything that can be
14 explained?

15 A. So 2009 was a very difficult year for the dairy
16 industry. Milk price dropped substantially during the
17 year, and the margin between feed cost and milk price was
18 greatly decreased. So the vast majority of dairy
19 producers in the country lost money during 2009.

20 Q. Okay. And then -- and then there was a rebound in
21 2014 due in large part to the higher milk prices?

22 A. Correct.

23 Q. Anything else that contributed to 2014 that you
24 believe is noteworthy?

25 A. So in 2014, we had really high milk price. We
26 also had relatively stable feed prices. So the -- the
27 largest factor that we see in dairy profitability is the
28 delta between milk income and feed costs. And so when we



1 see those -- the delta grow, that's when we're going to
2 see higher profitability.

3 Q. Okay. So reasonably priced feed, higher milk
4 prices, bigger margin?

5 A. Yes.

6 Q. Okay. And then carried through into 2020, the
7 same factors, and then the inversion between Class III and
8 IV?

9 A. So 2020, the Panhandle was interesting in that
10 year. With -- with the COVID-19 pandemic and the Food Box
11 Program from USDA, we saw large discrepancies in
12 profitability throughout different regions of the country.
13 The Panhandle had a relatively strong 2020 on average
14 within our report, whereas during the same timeframe, a
15 farm in Arizona, for example, on average, recognized a
16 loss.

17 Q. And then take us into a little bit more depth as
18 to what happened as we move into 2022.

19 A. So in 2022, we saw historically high milk prices,
20 but with multiple factors in the market and some political
21 conflict in Ukraine, for example. We also saw
22 historically high feed prices. So although the main
23 driver of profitability being milk income was at an all
24 time high, many farms did not capture all the promise of
25 that high milk price because they were -- they were also
26 exposed to high feed prices.

27 Q. So given kind of these anchor points that you have
28 described and the data that you have compiled in



1 Exhibits 80 through 85 -- no, 80 through 84, excuse me --
2 is it fair -- well, tell me -- tell me what you believe to
3 be the state of the financial condition for dairy
4 producers?

5 A. So dairy producers have historically operated with
6 volatility in their -- in their cost structure and in
7 their revenue streams. It has largely been outside of
8 their control as price takers.

9 Over the last -- you know, over the last decade --
10 I know CME trading has started beyond that -- but over the
11 last decade we have seen more producers start to utilize
12 risk management tools as a way and in an effort to better
13 protect themselves from some of those -- that volatility
14 and exposure.

15 However, there's a lot of outside forces that
16 still affect dairy profitability, in particular,
17 environmental regulation increases, labor costs
18 increasing, the current inflationary environment, interest
19 rate increases. A lot of those costs are being incurred
20 by dairies, and they don't have a way to necessarily pass
21 on that cost to their purchaser, to their buyers.

22 So over the last couple years, while we have had
23 some years of very good milk price, historically speaking,
24 the margins have not consistently grown. Over the last --
25 I think I -- in my testimony I say over the last ten
26 years, the margin has been on average under a dollar per
27 hundredweight. And so the margins that most dairy
28 producers are operating within do not represent a strong



1 return on investment versus, you know, other industries
2 and other investment opportunities.

3 Q. Okay. And when you said over the last -- I think
4 you said ten years?

5 A. Yes.

6 Q. The margins have been under a dollar a
7 hundredweight on average; is that right?

8 A. That's correct.

9 Q. And so what is your belief about whether dairy
10 producers could absorb a cost -- or a price decrease on
11 their milk for a dollar a hundredweight?

12 A. There are -- there are sections of the dairy
13 industry in the dairy producer pool that would be able to
14 incur that. However, there's a -- there's a significant
15 group, the lower tier groups, that would not be able to
16 incur that, probably the bottom half of the dairy industry
17 group.

18 And so I would expect if they saw a sustained time
19 period of a dollar less margin than what they have had
20 historically, they would be looking to exit the industry.

21 Q. And you talked about your experience working with
22 dairy producers who utilize risk management tools.

23 Could you estimate how many -- or a percentage of
24 the dairy producers with whom you work that are utilizing
25 risk management tools such as hedging or futures -- future
26 contracting?

27 A. So that -- that bounces around over time. I would
28 say, on average, I have probably upwards of 50 to 65% of



1 my clients are utilizing risk management in some capacity.

2 Q. And has that number increased over the last ten
3 years in your experience?

4 A. Yes. So on the heels of 2014, we had many
5 producers that shied away from risk management. But over
6 the last decade, we have seen a higher rate of adoption of
7 risk management strategies. But, obviously, that ebbs and
8 flows with what the markets offer.

9 Q. And you heard -- you were here present this
10 morning when the CME had a witness testify with respect to
11 the dairy market and risk management tools?

12 A. Yes.

13 Q. And do you have any -- any perspective or position
14 on the implementation lag for -- in this -- under National
15 Milk's proposal for milk components?

16 A. I feel there's -- there's always uncertainty when
17 entering into risk management decisions. But I think a
18 sophisticated participant in the market would weigh
19 those -- those uncertainties, and I think they would still
20 operate within the market even if there are lags or
21 uncertainties.

22 Q. Okay.

23 MS. HANCOCK: Thank you very much for your time,
24 and I'll be back up to offer your exhibits into evidence
25 in a bit.

26 THE WITNESS: Thank you.

27 THE COURT: Cross?

28 Mr. English.



1 CROSS-EXAMINATION

2 BY MR. ENGLISH:

3 Q. Good morning, sir. My name is Chip English. I'm
4 an attorney for the Milk Innovation Group --

5 A. Good morning.

6 Q. -- it's a group of fluid milk processors.

7 So I want to start with your cost chart and --
8 well, I guess it is income and chart cost, on the middle
9 of your page 2, and I want to know what's included or
10 what's not included, so -- because it's not clear to me.11 Are hedging gains and losses embedded in the milk
12 income or somewhere else in this analysis?13 A. Yes. So hedging income related to milk price
14 would be included in the milk sales.

15 Q. And what about government payments?

16 A. So government payments would be included in other
17 income within the operating trends report. So those would
18 not -- those would not show up in the milk sales per
19 hundredweight, but it would be reflected within the net
20 income or net loss number.21 Q. Okay. So when you discuss representative dairies
22 for inclusion, when you talk about the Panhandle, do you
23 include organic dairies in your representative dairies?24 A. So, no. No. We -- we would -- we would exclude
25 an organic dairy because their business operations would
26 not be reflective of the traditional dairy market.27 Q. So even though there's been significant organic
28 growth, you just do not include them?

1 A. Correct.

2 Q. Okay. Would the answer be the same for A2 milk?

3 A. Correct.

4 Q. Pasture-fed milk?

5 A. Correct.

6 Q. Just a highly technical question, for this record,
7 because -- just to avoid any confusion. In the discussion
8 on page 2, under 2020, you have a reference: "Class III
9 and Class IV milk prices, historically close to parity,
10 saw a spread."

11 My understanding of your use of the word parity is
12 the comparison between the Class III and the Class IV
13 price, correct?

14 A. That is correct.

15 Q. You were not referring to parity prices as that
16 term appears in the Agricultural Marketing Agreement Act?

17 A. Correct.

18 Q. Have you ever testified at a Federal Order hearing
19 before?

20 A. I have not.

21 Q. Do you understand that the purpose of Federal Milk
22 Marketing Orders is to set minimum regulated prices?

23 A. Yes.

24 Q. And that, therefore, market prices often are
25 higher than the regular minimum prices?

26 A. Correct.

27 Q. Okay. Do you understand that when USDA sets
28 Class III and IV prices, the intent is to set them at



1 market clearing levels?

2 A. That's how I understand it, yes.

3 Q. And one reason to set it at market clearing levels
4 is to make sure that the manufacturing facilities that
5 process dairy farmers' milk are actually still in business
6 to take the milk, correct?

7 A. Understood. Yes.

8 Q. And so overvaluing milk through Make Allowances
9 that are too low could also threaten, or would threaten,
10 the dairy industry if we lost manufacturing capacity,
11 correct?

12 A. Yes.

13 MR. ENGLISH: I have no further questions.

14 THE COURT: Mr. Rosenbaum.

15 CROSS-EXAMINATION

16 BY MR. ROSENBAUM:

17 Q. Steve Rosenbaum for the International Dairy Foods
18 Association.

19 Mr. Kootstra, are you -- are you aware that USDA
20 historically has rejected suggestions that they take
21 farmer cost of production into account in setting
22 Make Allowances?

23 A. I'm -- I'm not familiar with their history on
24 that, no.

25 Q. Okay. Let me just read you sentences from the
26 last time Make Allowances were changed in 2008. This is
27 from the USDA decision -- tentative partial final
28 decision, 73 Federal Register 35305 at 35324, June 20,



1 2008. And I'll quote: "Opponents of increasing
2 Make Allowances argue a number of points, that they are
3 already set too high a level" -- sorry -- "set at too high
4 a level, that dairy farmer production costs also have
5 increased significantly due to higher energy and feed
6 costs, that processors should look beyond asking dairy
7 farmers to receive less for their milk by charging more
8 for manufactured products, and that Make Allowances should
9 be made only when all dairy farmer production costs are
10 captured in their milk pay price. These are not valid
11 arguments for opposing how Make Allowances should be
12 determined or what level Make Allowances need to be in the
13 Class III and Class IV product pricing formulas," end
14 quote.

15 So are you suggesting that, in fact, USDA should
16 change its approach and start taking farmer cost of
17 production into account and studying Make Allowances?

18 A. Respectfully, my testimony was in regards to the
19 operating trends report. That was what I was asked to
20 speak about.

21 Q. Well, I -- I'm -- I -- I took your last paragraph
22 to suggest that dairy farmer costs should in your view be
23 taken into account in setting Make Allowances. Is that
24 not what you are -- are you -- are you, in fact, not
25 opining on that subject?

26 A. I don't have an opinion about what USDA's process
27 should be. I think, ultimately, milk pricing is going to
28 affect the dairy industry as a whole, and so I think each



1 aspect of it should be considered.

2 MR. ROSENBAUM: That's all I have. Thank you.

3 THE COURT: Further cross?

4 AMS?

5 I'm never going to get AMS in there consistently,
6 but AMS goes last. So when I say "further cross," I mean
7 from the participants other than AMS.

8 Ms. Taylor, your witness.

9 MS. TAYLOR: Thank you, your Honor.

10 CROSS-EXAMINATION

11 BY MS. TAYLOR:

12 Q. Thank you for coming here to testify today. I
13 just have a few questions.

14 I know you say that all your operations are
15 generally west. Can you talk about the size of the
16 operations that are your clients?

17 A. The vast majority of our clients are going to be
18 between 1500 and 20,000 milking cows. We -- we typically
19 do not work with many farms under that 500-,
20 800-milking-cow threshold.

21 Q. Okay. Do you know for their feed, do they
22 purchase their feed or do they grow their own feed,
23 generally?

24 A. All over the board. So we -- we enjoy a client
25 base that has many different business models.

26 Q. On your table on page 2, your first line is net
27 income. Can you define -- let us clarify for the record,
28 what went into getting the net income, like deducts or --



1 like, what's reflected in that number or not reflected?

2 A. Sure. So that would be a GAAP basis, financial
3 statement net income number. So that would be reflective
4 on a financial statement. That would include everything
5 from deducts, hauling, state and association, labor, herd
6 replacement costs. It would be an all-inclusive number.

7 Q. Okay. And later in your testimony, you talk about
8 how the average financial statement margin over the past
9 decade has been less than a dollar.

10 And, again, can you just clarify what went into
11 determining that margin that you are talking about?

12 A. So that would be a -- that would be after
13 reviewing the last number of years, that -- that number
14 specifically was over the last decade, of the net income
15 or loss generated by dairies within the report.

16 Q. So that would be on your table at the end --
17 excuse me -- your table on page 2, that would be income
18 loss per hundredweight --

19 A. Correct.

20 Q. -- to compare that?

21 A. Correct.

22 Q. And you indicated that many of your clients use
23 risk management tools?

24 A. Yes.

25 Q. Do you have any idea what risk management tools
26 they do utilize?

27 A. Sure. So they do use puts and calls. They do use
28 futures. Over the last number of years, we have seen a



1 significant move over to utilizing DRP, and some of the
2 other margin programs as well.

3 Q. Do you know about what percentage of their milk
4 production they might cover or the range?

5 A. I -- you know, I have clients that -- that will
6 cover 100% of their production, plus the yield factor
7 on -- on using the DRP program. Every -- every client
8 has a different -- a different method or a different
9 strategy that they like to employ.

10 MS. TAYLOR: All right. I think that's it from
11 AMS. Thank you.

12 THE WITNESS: Thank you.

13 DR. CRYAN: Roger Cryan --

14 THE COURT: You violate the AMS last rule again.

15 DR. CRYAN: No, this is -- this is -- this is a
16 response to one of the questions that Ms. Taylor asked.

17 THE COURT: All right. We have --

18 DR. CRYAN: I'm Roger Cryan with the American Farm
19 Bureau Federation.

20 THE COURT: This is re-cross in follow-up to AMS's
21 cross.

22 RE-CROSS-EXAMINATION

23 BY DR. CRYAN:

24 Q. You described a variety of risk management tools
25 that your clients are using to -- to manage their price
26 risks in the context of a Federal Milk Marketing Order
27 system.

28 Can you -- can you talk about how those -- those



1 tools are -- the use of those tools is affected by
2 depooling and negative PPDs?

3 A. Sure. So as we -- 2020 was the prime example of
4 that as far as negative PPDs. In California, for example,
5 we had an \$11 spread between Class III and Class IV during
6 periods of that year. We saw Class III exit the pool.
7 And so we -- we saw a number of clients that had some
8 protection in place, and they -- they were exposed to that
9 negative PPD.

10 Since then, we have seen a lot more clients using
11 DRP separate their Class III, Class IV contracts into
12 separate policies to better insulate themselves from a
13 situation like that. Yeah.

14 Q. And it was the depooling that made the basis --
15 created the basis problem for the producers in the pool
16 when Class III exited the market; is that right?

17 A. No. No. So the PPD was largely, in part, because
18 of the pricing mechanism for Class I.

19 DR. CRYAN: Okay. Very good. Thank you.

20 THE WITNESS: Yeah.

21 THE COURT: Further re-cross?

22 Ms. Hancock.

23 REDIRECT EXAMINATION

24 BY MS. HANCOCK:

25 Q. Thank you, Mr. Kootstra.

26 Is it fair to say that there are milk cycles?

27 A. Yes.

28 Q. And -- and that's what we're seeing in the trends



1 report that you have provided?

2 A. Yes. We see cycles.

3 Q. And in your experience looking back over the data
4 that you provided, do you think that it's getting less
5 predictable?

6 A. No. I think -- I think the markets have been
7 volatile. I think there are lots of factors that play
8 into the different cycles that we see. And, you know, we
9 have ease of access to information that we -- we
10 historically have not had. So I think maybe we see some
11 more knee-jerk reactions because we see a headline, but I
12 think the market's always been volatile.

13 Q. Do you -- do you think that you're seeing more
14 volatility with -- with our access to media and
15 information and knowledge of events and the communication
16 methods that are out there now?

17 A. I -- I think that's plausible, yeah.

18 Q. Okay.

19 MS. HANCOCK: Your Honor, at this time I would
20 move for admission of Exhibits 79 through 84.

21 THE COURT: Any objections?

22 MR. HILL: No objections.

23 THE COURT: Exhibits 79 through 84 marked as
24 identification as such are admitted into the record.

25 (Thereafter, Exhibit Numbers 79 through 84
26 were received into evidence.)

27 MS. HANCOCK: Thank you, your Honor.

28 THE COURT: Thank you. You are dismissed. You



1 may step down.

2 Who is next?

3 MS. TAYLOR: Your Honor, we have Ms. Lynne McBride
4 here from CDC to testify on their proposal, number -- and
5 their survey products. And I think it might be helpful to
6 finish up a little more on Proposal 1. So if it's
7 possible -- and her testimony then would be uninterrupted
8 after lunch.

9 So for now I think if maybe Dr. Cryan would like
10 to testify from Farm Bureau, I think his testimony is in
11 support of Proposal 1.

12 THE COURT: Any objections? Did you work this out
13 with the other parties?

14 MS. TAYLOR: Uh-huh.

15 THE COURT: Very well.

16 Mr. Cryan, you are off to the stand. Put on your
17 witness hat.

18 Raise your right hand.

19 ROGER CRYAN,

20 Being first duly sworn, was examined and
21 testified as follows:

22 THE COURT: All right. You are your own witness
23 here. I won't make you walk back and forth to the
24 lectern.

25 DR. CRYAN: Okay. Thank you.

26 MR. HILL: Your Honor, one moment. Could we
27 please have his testimony marked as Exhibit Number 85 for
28 identification? Is that correct?



1 THE COURT: Yes, that's what I -- we can do --
2 well, I can do that then.

3 Let's mark Exhibit AFBF-1 for identification as
4 Exhibit 85. This is the statement -- or Direct Testimony
5 for Federal Milk Marketing Order Pricing Hearing, American
6 Farm Bureau Federation, by Mr. Cryan, who is on the stand.

7 (Thereafter, Exhibit Number 85 was marked for
8 identification.)

9 THE WITNESS: Thank you, your Honor.

10 THE COURT: You may give your statement.

11 THE WITNESS: Let me start by saying my name is
12 Roger Cryan, C-R-Y-A-N. I'm the chief economist of the
13 American Farm Bureau Federation. The address is
14 600 Maryland Avenue Southwest, Suite 1000W, Washington DC,
15 20024.

16 And I will first attempt to establish my
17 credentials as an expert. It may be redundant because
18 Mr. English has done this in the past.

19 But I'll say that I have worked for dairy farmers
20 for 40 years. My first job was working on the dairy farm
21 tossing bales. I studied agriculture in high school. I
22 got a Bachelor's degree in international studies at Johns
23 Hopkins, including a semester at Cornell studying
24 agriculture.

25 I interned at the Economic Research Service at
26 USDA one fall. I got my Master's and Ph.D. at the
27 University of Florida -- from the University of Florida in
28 agri- -- in food and agricultural -- fluid and resource --



1 I'm sorry, I'm going to slow down -- food and resource
2 economics.

3 I interned with Gus Schumacher at the
4 Massachusetts Department of Food and Agriculture in 1988.
5 I did dairy work -- some dairy work in the assistantship
6 at Florida working on best management practices for waste
7 management. I did my -- one of my field papers at Florida
8 in agricultural policy, including an analysis of the early
9 New Deal programs, of which the Agricultural Marketing
10 Agreement Act is essentially the last remnant.

11 Four years I spent at the Atlanta Milk Market
12 Administrators office on -- during the time of Federal
13 Order Reform, from 1996 to 2000, which was probably the
14 best possible school for learning how Federal Orders work
15 and considering how to open the hood and change things
16 around.

17 I spent 12 years then at the National Milk
18 Producers Federation, which was also a good place to learn
19 about issues beyond Federal Milk Marketing Orders. I
20 worked on a wide range of issues, including labeling and
21 EPA issues and CFTC issues. I served on the CFTC
22 Agricultural Advisory Committee, as well as NASS Ag
23 Advisory Committee. And I led National Milk's efforts in
24 at least -- at least four hearings while I was there.

25 I spent -- I have spent two years -- oh, I
26 spent -- I'm missing -- so I have spent -- I spent ten
27 years at USDA working with these good folks, another good
28 place to learn about how things work.



1 And at USDA I was the director of the economics
2 division in AMS's Dairy Programs where I oversaw Dairy
3 Market News, as well as the market information group that
4 collected the survey that Federal Order prices are based
5 on and the economists who will do the analysis on this.
6 It was another rewarding opportunity. And I worked on a
7 number of things beyond dairy within USDA.

8 And then I came over almost two years ago to the
9 American Farm Bureau, which is an outstanding
10 organization, which I will touch on in my testimony, and
11 have learned on even -- an even broader context in
12 agriculture.

13 And after 42 years, I'm still working for dairy
14 farmers, and that's why I'm here today.

15 And let me see. Yeah, so --

16 THE COURT: Tossing bales will encourage one to
17 move to a different part of the industry, hey?

18 THE WITNESS: Yes, sir. Yes, sir.

19 So I would ask that I -- I -- in all -- in all
20 modesty, I would ask that I be recognized as an expert on
21 Federal Milk Marketing Orders and milk marketing.

22 THE COURT: Yes, I -- unless there's objection, I
23 find that you are qualified to testify on those matters as
24 an expert witness.

25 THE WITNESS: Thank you.

26 I will also -- okay. I will now read my -- my
27 statement, which is not very long.

28 The American Farm Bureau Federation has nearly



1 6 million member families in all 50 states and Puerto
2 Rico, including many thousands of cooperative and
3 independent dairy farmers. All of these dairy farmers are
4 indirectly or mostly directly -- mostly directly affected
5 by the pricing provisions of the Federal Milk Marketing
6 Orders (FMMOs).

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

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

17 And we do respect the decisions that USDA made
18 about what to include and what not to include for the
19 record.

20 The fundamental focus of AFBF's proposals is the
21 reduction or elimination of negative producer price
22 differentials, which are called PPDs, and the depooling
23 that they cause. We believe that an orderly pool is the
24 key to orderly marketing and the continued benefits of the
25 Federal Milk Marketing Order system to farmers,
26 cooperatives, processors, and consumers. The key to an
27 orderly pool, in turn, is above all the proper alignment
28 of the four class prices.



1 In addition to our own proposals, AFBF largely
2 supports four of the five proposals submitted by NMPF
3 (Proposals 1, 3, 13, and 19). And for these I will
4 outline any substantive differences in our position with
5 an explanation for that difference.

6 I'll skip the next sentence.

7 This statement covers Category 1, Milk
8 Composition, and includes AFBF's response to Proposal 1
9 made by NMPF.

10 Regarding Proposal 1, National -- the National
11 Milk -- which is the National Milk Producers Federation's
12 proposal to incorporate updated component values into
13 Class III and Class IV price formulas.

14 AFBF supports the updating of those component
15 values in the Class III and Class IV skim milk price
16 formulas based on the same logic presented by NMPF.
17 Adjusting these values will more accurately define the
18 market value of skim milk used in the skim/butterfat
19 markets and in Class I in all markets.

20 In component markets, it will ensure that Class I
21 milk prices reflect at least the national average
22 component value rather than a low, outdated value which
23 undermines the premium for Class I milk intended by FMMO
24 pricing formulas, per years of FMMO hearing proceedings.

25 This higher value for Class I will, like the
26 adjustments to the Class I differentials, increase the
27 Class I price by an average of about \$0.70 per
28 hundredweight based on the simple average of 2022 data.



1 It will reduce the incidence of price misalignments with
2 Class III and IV prices, reduce the size of frequency of
3 negative PPDs, and so reduce incentives for depooling,
4 which undermines orderly marketing and the principle of
5 uniform pricing in the market.

6 In addition, raising the value of skim milk in the
7 manufacturing classes, which are II, III, and IV, in the
8 skim/butterfat markets will reduce the current
9 misalignment of FMMO minimum prices for those classes
10 between those markets, that is the skim and butterfat
11 markets, and the bordering component markets.

12 Today, proprietary and cooperative manufacturing
13 plants located in Federal Order 32 or 126, for example,
14 have undue incentive to pool the Class II, Class III or
15 Class IV milk that they receive on Federal Order -- that
16 they receive on Federal Order 5 or 7, for example, because
17 the FMMO minimum price at an average test for that milk in
18 a skim/butterfat order is substantially lower than the
19 minimum price for the same milk in a component order based
20 on the current outdated component tests embedded in the
21 current formulas.

22 By USDA's calculations, the simple average of this
23 gap is \$0.52 for Class II, \$0.77 for Class III, and \$0.50
24 for Class IV, in 2022. That's based on Exhibit 45.

25 Incentive produced by this gap creates undue
26 "pool-riding" in the deficit markets of the Southeast,
27 beyond the incentive of higher uniform prices in those
28 markets. This undermines the uniform price in those



1 market, which makes supplying those deficit markets more
2 difficult.

3 This unnecessary and distortionary incentive to
4 pool on the "wrong" market -- in quotes -- would be
5 substantially reduced by adoption of updated component
6 tests in the skim milk price formulas. Adjusting those
7 component values in the Class III, Class II -- sorry --
8 Class II, Class III, and Class IV price formulas,
9 therefore, will improve the orderly marketing of milk in
10 multiple ways.

11 And on my written testimony I intended to ask for
12 the source to be recognized, but it has already been
13 recognized as Exhibit 45, for which I thank the USDA
14 for -- for providing that data.

15 That -- I have a couple other comments, just to
16 re- -- to reemphasize a couple things.

17 Our focus really is about adjusting -- addressing
18 the price misalignments. We think it's better to address
19 the price misalignments to improve the pull towards the
20 pool, towards pooling milk, rather than trying to build
21 fences and rope-pushing provisions that will force milk to
22 pool.

23 I'd also point out that fluid -- a number of folks
24 who have talked about how fluid sales have declined as a
25 percentage of milk in the market, there has been
26 absolutely decline. But the larger part of the percentage
27 decline has been based on growth and other use, excluding
28 exports. And it is appropriate to consider price



1 adjustments, changes in the way we consider the prices, in
2 order to make better use of the system in connection with
3 the current allocation of milk within the market.

4 It's been well established that depooling is
5 disruptive to producers and to the markets generally, but
6 particularly to producers. And we -- we are aiming to
7 demonstrate that throughout the hearing.

8 And finally, it's really critical to understand,
9 this is not -- this particular provision is -- that
10 National Milk has proposed, Proposal 1, is not just about
11 raising the Class I price. It is about updating the
12 alignment of class prices around the country, but
13 particularly in that small pocket that is a third -- a
14 quarter of the country in the Southeast that relies on
15 skim and butterfat pricing.

16 That will conclude my direct testimony, your
17 Honor.

18 THE COURT: Yes.

19 THE WITNESS: And I am available for
20 cross-examination.

21 THE COURT: I'd ask a question. Did I hear you
22 refer to rope-pushing provisions? Would you elaborate on
23 that, if I heard that correctly?

24 THE WITNESS: Yes, sir.

25 When there's discussion about depooling of milk in
26 the -- in the Federal Orders, very often folks talk about
27 provisions like we have in a number of orders that either
28 sort of punish handlers for depooling, making it --



1 typically by make it harder to come back in afterwards, or
2 provisions that really sort of, as memory serves, force --
3 force handlers to make a decision for the court for a
4 whole year, whether or not to pool or not to pool.

5 And those are essentially designed to overcome the
6 incentives that the -- that the current price
7 misalignments place on handlers to choose whether or not
8 to pool. Depooling by manufacturers is a long-established
9 part of the system. It is designed to make sure that
10 manufacturers only pool when -- when it is appropriate to
11 serve -- help to -- contribute to serving the fluid
12 markets or to generally contribute to serving orderly
13 marketing.

14 And we believe that price alignment -- getting the
15 prices in better alignment is -- Is a better first step
16 than simply trying to force milk to stay in the pool.

17 THE COURT: So the reference to rope-pushing is
18 that it's difficult to get certain players to do what the
19 marketing orders want them to do.

20 THE WITNESS: Right.

21 THE COURT: It's like pushing a rope.

22 THE WITNESS: Right.

23 THE COURT: Very well.

24 THE WITNESS: Yes, sir.

25 THE COURT: Cross-examination?

26 Yes. Mr. English.

27 CROSS-EXAMINATION

28 BY MR. ENGLISH:



1 Q. Dr. Cryan, my name is Chip English on behalf of
2 the Milk Innovation Group.

3 So I want to start on the back of page 2 where you
4 are discussing the deficit markets in the Southeast. And
5 you say there's an incentive produced by the gap, that's
6 referenced in the sentence above, that "creates undue
7 'pool-riding' in the deficit markets of the Southeast."

8 What evidence do you have that pool-riding is
9 going on in the Southeast?

10 A. It's a conceptual argument, and I don't -- I don't
11 have data.

12 Q. If you -- if you look at the data, for instance --
13 you have been here for the hearing for most of the entire
14 time, right?

15 A. Yes.

16 Q. Okay. So, for instance, my examination of
17 witnesses -- Mr. Covington, for instance -- on what's
18 going on in the Southeast, given the significant drop in
19 volume that is associated with those orders, wouldn't that
20 suggest that there isn't any pool-riding going on?
21 There's barely any milk there at all.

22 A. I haven't examined that.

23 MR. ENGLISH: Your Honor, I move to strike that
24 statement. As this witness has just -- since it's
25 theoretical, he has no evidence of it, hasn't examined it.
26 There's no basis for that statement.

27 THE WITNESS: Your Honor, it's an -- it's an
28 economic theoretical statement that has merit on its own,



1 on its own basis.

2 THE COURT: I'm going to deny the motion to
3 strike, but it obviously goes to the weight. The witness
4 is saying that it's a theoretical construct that he's
5 opining on without particular evidence to support it, so
6 I'll allow it in.

7 MR. ENGLISH: Thank you, your Honor.

8 BY MR. ENGLISH:

9 Q. So, Dr. Cryan, given your experience, for
10 instance, at USDA, your testimony is about alignment of
11 prices and purported disorderly marketing. It is not that
12 there is an inadequate supply of milk for fluid use, is
13 it?

14 A. Well, I think we have heard testimony of this --
15 of this in this hearing, that it's very difficult at times
16 to supply the fluid market in the Southeast markets. And
17 in those markets, particularly, the orders still --
18 they -- they serve the purpose for which this was
19 designed, which is to help ensure an adequate supply of
20 fluid milk.

21 Q. On a national basis, sir, correct? You were at
22 USDA. It is a national basis. It is not a specific order
23 basis, is it?

24 A. There are 11 -- ten -- there are ten Federal
25 Orders, and each one of them is designed to serve a
26 different market. It is not -- fluid milk marketing is
27 not a national business, it is a regional business.

28 Q. But for purposes of minimum pricing and the prices



1 that are national prices, those are based upon a national
2 market; isn't it true, sir?

3 A. The national -- the use of national pricing to set
4 the prices for all of these -- all of these classes is
5 intended to maintain alignment among them at their edges.
6 If they -- if they all operated separately, it would -- it
7 would create disorderly marketing.

8 Q. That's not adequate supply. That's a different
9 standard, isn't it, sir?

10 A. No, it's about maintaining adequate supply,
11 certainly in four markets, in -- in the --

12 Q. Four markets, you mean three markets --

13 A. In the three --

14 THE COURT: One at a time. One at a time.

15 THE WITNESS: Certainly in the three Southeastern
16 markets it is about maintaining an adequate supply of
17 fluid milk.

18 BY MR. ENGLISH:

19 Q. With a national Class I average of around 27%
20 Class I, how can you say there isn't an adequate supply of
21 milk for fluid use?

22 A. In those markets it is -- it is difficult to
23 maintain that supply.

24 Q. You are going to refuse to answer the question on
25 a national basis, sir?

26 ///

27 ///

28 ///



1 A. It's -- it is not -- it's a program -- it's a
2 national program that addresses regional markets. It is
3 inappropriate to consider it only a national basis.

4 Q. On the bottom of page 1, I'm not going to belabor
5 it, but the question you say -- you talk about the higher
6 value for Class I.

7 You don't have any research studies to show that
8 Class I plants place higher value on more protein, do you?

9 A. I -- I know by experience that many Class I plants
10 do put some value on that. I would certainly not argue
11 that it is the full component value in the -- in the
12 Class III price. But that's not really the point. The
13 point is to get these prices, these class prices into an
14 alignment that better serves for orderly pooling and
15 orderly marketing in each market.

16 Q. You have no research on that subject, do you, sir?

17 A. On which subject?

18 Q. On the subject of the higher value allegedly in
19 Class I milk for fluid plants. You don't have research.
20 You claim you had experience, but you don't have research,
21 do you, sir?

22 A. I have -- I have the experience of knowing that
23 there are -- there are fluid processors who fortify milk
24 in order to maintain a better milk -- mouth taste and a
25 higher -- and a better nutritional composition. There
26 are -- there are companies who clearly by their actions
27 demonstrate that they put a value on additional solids and
28 protein in milk.



1 Q. Okay. Leave aside my question about research for
2 a moment, which I'll come back to. That's a very small
3 fraction of the fluid milk, isn't it, sir?

4 A. I don't know.

5 Q. You don't have any research, do you? You just
6 said you don't know?

7 A. I think -- I mean, the Department has data on
8 fortification. I would be interested to see that data.

9 Q. Okay. I'm going to come back one more time.

10 A. Should we request fortification data from the
11 Department?

12 Q. I'm asking the questions, sir. I'm not going to
13 answer them.

14 I want to go back to my question again. Please
15 answer the question I'm asking: Do you have research on
16 alleged greater value in Class I milk because of higher
17 protein?

18 A. I -- I have experience. How you define research,
19 I don't have the formal --

20 Q. You -- you are -- yes, you are an economist. You
21 just qualified yourself --

22 MS. HANCOCK: Your Honor, if he could be permitted
23 to finish his answer. He's not even my witness, but I
24 think our record deserves it.

25 THE COURT: Yes. One at a time. The record's
26 going to get --

27 MR. ENGLISH: I'll do that, but I prefer to get an
28 answer.



1 THE COURT: The witness -- well, hold on. Hold
2 on. The witness just said he's not sure what research
3 means in this context. I guess I'm not sure either.

4 MR. ENGLISH: Well --

5 THE COURT: But I don't want to interrupt
6 your cross.

7 BY MR. ENGLISH:

8 Q. You are a professionally-trained economist,
9 correct?

10 A. I am.

11 Q. When a professionally-trained economist does
12 research, what does that mean, sir?

13 A. A practical economist takes their knowledge and
14 information from whatever source it comes from, and
15 experience is as valid as a formal research paper.

16 Q. What is a formal research paper?

17 A. A formal academic research paper is something
18 where folks go out and do a formal evaluation or a formal
19 study and then share it with other academics to consider
20 that. But there's an awful lot of knowledge about the
21 industry that is shared -- will be shared by some of your
22 witness and by -- by witnesses from across this hearing
23 that is not based on formal research. The fact that I
24 have a Ph.D. doesn't mean the only place I can find
25 information or knowledge is from formal research.

26 Q. All right. So let me ask the question: Do you
27 have formal research studies to support your thesis?

28 A. I do not.



1 Q. Thank you.

2 MR. ENGLISH: I have no further questions.

3 THE COURT: Thank you, Counsel.

4 CROSS-EXAMINATION

5 BY MR. COVINGTON:

6 Q. Calvin Covington representing Southeast Milk.

7 Good morning, Dr. Cryan.

8 A. Good morning, Calvin. It is nice to see you.

9 Q. I would like to -- I would like to follow up on
10 the questions that you had concerning Federal Milk
11 Marketing Orders.

12 Is it correct that the Federal Milk Marketing
13 Order system, all 11 orders, would have some provisions
14 that are uniform to all orders?

15 A. Yes.

16 Q. Okay. But because there are regional differences
17 throughout the United States, each of the 11 separate
18 Federal Milk Marketing Orders would have a number of
19 provisions that are different?

20 A. Absolutely.

21 Q. And it would be safe to say that the reason it has
22 those different provisions is to meet the milk marketing
23 needs in each particular order?

24 A. Absolutely. Yes, sir.

25 Q. And would some of those different provisions
26 relate to there being different pooling standards, how
27 much milk has to participate or what days you have to
28 touch base in order to participate in the pool?



1 A. That's right. There are markets where it's harder
2 to supply and the requirements are -- are greater.

3 Q. And would it be, likewise, some -- some orders,
4 especially orders that have a high fluid utilization, that
5 the amount of milk that they could divert is going to be
6 more stringent than compared to orders that have high
7 manufacturing volume of milk?

8 A. Yes, sir. In a lot of those markets the pooling
9 reaches close to the mathematical maximum allowed by those
10 standards.

11 Q. Okay. And also, each Federal Milk Marketing
12 Order, even within the particular orders, would have
13 different Class I differentials?

14 A. Absolutely.

15 Q. Okay. And again, the purpose -- or the reason to
16 having different Class I differentials is to meet the
17 various milk marketing needs of those different orders?

18 A. Yes. Yes, sir.

19 Q. Okay. Thank you.

20 One more question. You -- in your testimony, you
21 state that you support the National Milk Producers
22 Federation Proposal Number 1; is that correct?

23 A. Yes, we do.

24 Q. Okay. Do you support all provisions of the
25 National Milk Producers' proposal, including the 12-month
26 delay and the updating factors every three years?

27 A. We -- I don't know that we -- we understand -- we
28 understand the logic behind it. I don't know that we have



1 a position on that one way or the other. We think the
2 most important thing, though, is that these adjustments be
3 made to bring prices in better alignment.

4 Q. So --

5 A. Which, as in many details, we will trust USDA to
6 make a wise decision about how -- how that's implemented.

7 Q. But as I understand, you're -- overall you're
8 supporting Proposal Number 1?

9 A. Yes, sir, we are.

10 Q. Okay.

11 A. In its most fundamental elements, we absolutely
12 are supporting Proposal Number 1.

13 Q. Thank you.

14 A. You're welcome.

15 THE COURT: Further cross before we get to AMS?

16 Yes, sir.

17 CROSS-EXAMINATION

18 BY MR. VETNE:

19 Q. John Vetne, representing National All-Jersey.

20 Good morning, Dr. Cryan.

21 A. Good morning.

22 Q. I'm turning to page 2 of your prepared testimony,
23 Hearing Exhibit 85. At the top of the page, you refer to
24 negative PPDs and depooling and conclude that it
25 undermines the principle of uniform pricing in the market.

26 Do you see that?

27 A. Yes, I do.

28 Q. Okay. Are you aware that the Act under which milk



1 orders are implemented provides for uniform pricing
2 between handlers in class prices as well as uniform
3 pricing to producers? Has two elements?

4 A. I understand that the one of the principles of
5 Federal Order -- the authorizing legislation for Federal
6 Orders is that producers within the pool will be paid a
7 uniform price in order to maintain more orderly marketing
8 and to avoid incentives for uneconomic competition.

9 Q. Okay. Are you also aware that the Act requires
10 that class prices charged -- required of handlers also be
11 uniform so that one handler is paying the same Class I
12 price or Class II as another handler?

13 A. Roughly. I mean, of course, there are differences
14 in different minimum -- uniform minimum prices and
15 adjusted by location, of course.

16 Q. That would apply only to the Class I?

17 A. Class I. Well, uniform prices are also adjusted
18 by location.

19 Q. Pardon?

20 A. Uniform price is also adjusted by location.

21 Q. Uniform producer prices?

22 A. That's right.

23 Q. But as between handlers, Class III prices are not
24 adjusted by location?

25 A. No.

26 Q. Class II prices are not adjusted by location?

27 A. No.

28 Q. Class IV prices are not adjusted by location?



1 A. Nope.

2 Q. So it's only in the producer's uniform price and
3 in the handler Class I price that the uniform price has
4 location adjustments?

5 A. Right.

6 Q. Okay. When you used the term undermine principle
7 of uniform pricing, were you referring to undermining the
8 uniform producer price, the uniform class price, or both?

9 A. The uniform producer price, because if producer's
10 milk is depooled, even if the -- even if -- if a
11 producer's -- if -- if a producer is supplying milk to a
12 Class III plant and the Class III price is high -- is
13 depooled, that producer receives one price, and the
14 producers that remain in the pool, a pool that is maybe --
15 maybe depleted by the withdrawal of Class III milk, those
16 producers receive a different price.

17 And so the uniform -- the uniformity of prices
18 within a location, within a region, or even a small region
19 where normally the prices received are uniform, that --
20 that blows up. It also has, of course, impacts, as
21 Mr. English just said, on risk management and a whole lot
22 of other things, which will be explored at length at this
23 hearing, the problems created by depooling and negative
24 PPDs.

25 Q. Okay. Would you agree with me that when there is
26 depooling, that uniform pricing between handlers is also
27 affected? A handler who no longer receives milk priced
28 under the order has a different price than a handler who



1 receives milk priced under the order, just like producers.

2 A. I mean, a producer who -- a handler that's not --
3 a handler that's receiving unpooled milk doesn't have a
4 minimum payment obligation, of course.

5 Q. No, it doesn't. And I'm trying to get the point
6 here.

7 So a producer whose milk is depooled, when you are
8 referring to non-uniform prices between producers, the
9 producer who is no longer for that month, under the order,
10 there's no minimum payment obligation, correct?

11 A. Right.

12 Q. Okay. But you do have a situation where one dairy
13 farmer whose milk is depooled gets the benefit of a higher
14 Class III price, for example, than a neighbor whose milk
15 remains pooled? That's what you are referring to as
16 non-uniform?

17 A. At times, yeah. In some -- in some cases,
18 Class III plants have depooled and they have paid the
19 producers substantially the Class III price, but that's
20 a -- that's a different price from the uniform price of
21 the milk that remains.

22 Q. Okay.

23 A. Yeah.

24 Q. And that same difference between pooled and
25 unpooled milk and prices would apply to handlers, whether
26 their milk is pooled or not. It would be a departure from
27 uniform pricing as between handlers.

28 A. Handlers that don't -- manufacturers that don't



1 pool don't have a minimum payment obligation under any --
2 you know, normally. And so I'm not sure how -- I'm not
3 sure how to answer that.

4 Q. But you answered it with respect to producers
5 whose milk has no payment obligation. But you -- but can
6 you not answer it with respect to handlers who have no
7 minimum obligation?

8 A. Handlers -- handlers can -- I guess I'm not -- I
9 guess I'm not finding the right words to -- to -- to
10 harmonize with what you are -- you are asking.

11 Q. Okay. Let me -- I see there's a difficulty. I
12 accept it.

13 A. I mean, there are situations -- and maybe -- maybe
14 this -- this answers the question.

15 There are -- certainly there are situations where
16 these prices get out of line, and some handlers end up
17 with opportunities to depool and capture windfall, and
18 they end up -- where they are normally paying a minimum
19 price under the order, they end up not having to pay, and
20 then they -- they -- they benefit from -- from the
21 depooling opportunity.

22 Q. That's --

23 A. Does that answer the question?

24 Q. It -- it does.

25 A. Okay.

26 Q. So the handlers that get the benefit of windfall
27 have a non-uniform price, non-uniform benefit compared to
28 handlers who remain in the pool, correct?



1 A. Right. And considering that those handlers are
2 often taking full advantage of the pool, not -- not in a
3 pejorative sense, but just the fact that they normally
4 participate in the pool in order to receive the benefits
5 of that, it -- it -- one of the reasons for so many of
6 these programs that push the rope is to -- is to kind of
7 find fairness, to make sure that folks pool consistently.
8 And we believe that -- that price -- improving the price
9 alignments is a better first step for making that happen
10 than -- than rope-pushing exercises.

11 Q. Exactly. Thank you.

12 In the next paragraph you use the term
13 pool-riding, but you didn't define it. Can you do that,
14 please?

15 A. I guess that's probably a -- probably shouldn't
16 have been in my testimony but -- well, I think most folks
17 know what -- know what the concept means.

18 The idea is that there's -- there's milk that
19 isn't really serving -- in the Southeastern markets, for
20 example -- milk that isn't really serving the fluid market
21 in any sense, that is -- that is being pooled in order to
22 take advantage of the higher uniform value in -- in the
23 South -- in the Southeastern markets.

24 And I would say that the system is set up the way
25 the system is set up. So it's not necessarily -- there's
26 nothing to blame when folks ride -- you know, ride the
27 pool. When they -- when they pool because there's an
28 advantage, there's an incentive created by the rules of



1 the order, that that's -- they are following the rules of
2 the order.

3 But when the rules of the order create a gap
4 between the value of Class III or IV milk under the --
5 under the orders -- under the Southeastern orders and
6 under the component orders, that -- that creates an
7 incentive for -- for undue additional milk being pooled on
8 those markets, and pooled on those markets in a way that
9 depletes the Class I value that's intended to incentivize
10 milk to be delivered for Class I use.

11 THE COURT: I'm sorry to interrupt, but you just
12 said you probably shouldn't have testified to that --

13 THE WITNESS: I probably should not have used the
14 phrase "pool-riding," but I -- I believe that my comments
15 have clarified my intent and that I did not -- I did not
16 really mean it in any pejorative sense. It is often used
17 in a sense that somebody is doing something underhanded
18 and getting away with things --

19 THE COURT: Yeah, very well. You are not
20 disavowing the rest of your sentence?

21 THE WITNESS: I am not disavowing, in fact, any of
22 the stuff. I am simply saying I might have chosen a
23 better phrase than "pool-riding," and I'm clarifying my
24 intent in using that phrase.

25 THE COURT: Okay.

26 BY MR. VETNE:

27 Q. And following that line in your testimony, you,
28 again, refer to uniform prices: "This undermines the



1 uniform prices in those markets."

2 And with respect to that reference to uniform
3 prices, were you referring to uniform prices between
4 producers, dairy farmers, between handlers, or both?

5 A. I was referring to the uniform producer price on
6 the market, which is -- in a high Class I utilization
7 market is intended to attract milk to where it's needed.

8 Q. Oh, okay. So you weren't referring to a situation
9 of non-uniformity between producers?

10 A. No. No.

11 Q. You were referring --

12 A. That --

13 Q. -- or making a point that the price wasn't high
14 enough?

15 A. In that -- in that paragraph, undermining the
16 uniform price means undermining the blend price in that
17 market in a way that undercuts the ability of the order to
18 support the delivery of fluid milk to those deficit
19 markets.

20 Q. And your objective is to point out that the
21 uniform price is lower than it should have been or lower
22 than it should be; is that correct?

23 A. Yes, sir.

24 Q. Okay.

25 A. It is -- I wanted to emphasize that because I had
26 not seen that point raised in any -- anyone else 's
27 testimony, that that -- that that border issue is pretty
28 significant and needs to be addressed, and the best way to



1 address it is -- is by -- by updating those component
2 levels.

3 Q. Okay. So let me maybe illustrate the border
4 issue.

5 If -- if near the border there is producer milk
6 that is on a component basis lower than average, that milk
7 could receive a better return going to a fat/skim order
8 than to a multiple component order, correct?

9 A. The -- the component standards in the formulas
10 right now are well below the average.

11 Q. Yes.

12 A. So a producer whose milk's -- whose milk
13 composition is below the average could very easily still
14 get a higher price in the component market than in the
15 skim/butterfat market.

16 Q. Okay. And if you -- if you raise the standard, it
17 would reduce the incentive to remain in the component
18 market and encourage it to flow --

19 A. It would --

20 Q. -- to the Southeast?

21 A. No, no. No, no. It would reduce the incentive of
22 the plants to -- to pool milk that they receive on the
23 skim/butterfat markets where they are able to pay a lower
24 price or their obligation is lower than when they have to
25 pay on the components, if they pool in Order 32 or 126,
26 for example, versus pooling on Order 5 or 7.

27 The handlers' obligation is increased when they
28 have to pay the component value for the average -- for the



1 average milk producer. And for the producers that they
2 would prefer to have, which are higher component
3 producers, it's even -- it is a bigger gap. But the
4 averages are a reasonable conclusion and a reasonable
5 approach to fixing -- to fixing the gap with -- the gap in
6 the current formulas, as has been proposed by National
7 Milk and by your client.

8 Q. Milk would be more likely to flow from a component
9 milk shed to the Southeast?

10 A. Milk would -- okay. So the --

11 Q. Would the milk -- I'm sorry. Maybe the question
12 was wrong. I'm talking about milk flowing --

13 A. I'm going to answer the question --

14 Q. -- and money flowing --

15 A. If you let me answer the question, I'll answer the
16 question.

17 Q. Go ahead.

18 A. The -- fixing this would discourage milk that's
19 being delivered in places like Texas and Missouri and that
20 is not even -- that's not moving towards serving the
21 Southeastern markets. That -- that milk -- instead of
22 that milk being pooled -- if that milk was not encouraged
23 to pool on Orders 5 and 7, then, arguably, the uniform
24 price in Orders 5 and 7 would be higher, and that would
25 better attract milk to the -- to the -- to the fluid
26 plants, to the distributing plants that need to be
27 supplied, that whose purpose -- whose purpose the Federal
28 Order is to supply.



1 Q. Got it. Thank you.

2 A. Sure. Thank you.

3 THE COURT: Okay. AMS?

4 MS. TAYLOR: Thank you, your Honor.

5 CROSS-EXAMINATION

6 BY MS. TAYLOR:

7 Q. Good afternoon, Dr. Cryan. Check my time.

8 A. Good afternoon. Is it afternoon already?

9 Q. Barely.

10 A. Okay. Thank you, Ms. Taylor.

11 Q. Can you give us an idea, if your Farm Bureau
12 membership has 6 million members, about how many are dairy
13 farm members?

14 A. That's a good question. We don't -- we don't have
15 a count on that. But I have found -- I -- I -- I would
16 guess that we probably represent about as many dairy
17 farmers as National Milk. It is probably in the same
18 ballpark. I would not claim we represent more, but I
19 think it is in the same ballpark.

20 Q. Okay. And the Small Business Administration
21 defines a small producer as one making \$3.75 million or
22 less in farm income a year.

23 Do you know about what percentage of your dairy
24 farm members would meet that definition?

25 A. I -- if I -- if I had to guess, and I would be
26 guessing, I would think that our -- our members are
27 probably small businesses under that definition in a
28 slightly higher proportion than the national average,



1 because I -- you know, the Farm Bureau is a -- in --
2 serves many roles. When it began, it was kind of a
3 movement, kind of a social movement. It's -- it's -- in
4 many ways, it serves social roles. It's about bringing
5 farmers together to solve problems. And -- and in some
6 cases, the very large farmers tend to see themselves as
7 solving their own problems.

8 So I would -- I would guess that we skew a little
9 bit -- a little small, but not entirely because there are
10 an awful lot of large farmers in the Farm Bureau as well.

11 Q. Okay. And then I wanted to turn to the second
12 page in that paragraph where you talk about "by USDA's
13 calculations," and you calculated a gap.

14 And you said that was from Exhibit 45; is that
15 correct?

16 A. Yes. I think so. Let me double-check. Did I get
17 the number wrong?

18 Yes, Exhibit 45.

19 Q. Okay. So those specific numbers aren't on that
20 exhibit, so I was --

21 A. Oh.

22 Q. -- hoping you could explain how those calculations
23 were made.

24 A. Did I grab the wrong one? Did you -- do you have
25 an exhibit that has the annual averages, or did I simply
26 do --

27 Q. I don't know what you used. All I know is 45
28 doesn't have averages on it.



1 A. Okay. As I recall from my spreadsheet, this is --
2 must -- it would be a simple -- a simple average of the
3 differences.

4 Q. Which differences?

5 A. Between differences in the columns on the right.

6 Q. So that difference is in prices between current
7 and proposed component levels?

8 A. I think so. Yeah. Yeah, I think that's right.
9 Yes. I believe -- I believe so.

10 Q. Okay.

11 A. I have this spreadsheet in my head. I remember
12 the spreadsheet, and I believe that's what I did, yeah.

13 Q. Okay.

14 MS. TAYLOR: That's all the questions I have.
15 Thank you.

16 THE COURT: Re-cross?

17 Okay. We didn't really have direct. Anything you
18 would like to say in the nature of redirect testimony,
19 Mr. Cryan?

20 THE WITNESS: Yeah, that's a good question. I --
21 I think -- I think I have -- I think I covered everything
22 I wanted to cover in the initial direct testimony. So I'm
23 done if you are done.

24 THE COURT: Well, with that, I propose to enter
25 Exhibit 85 for identification into the record.

26 Any objections?

27 Seeing none, Exhibit 85 is admitted into the
28 record.



1 Mr. Cryan, you are dismissed. Thank you.

2 (Thereafter, Exhibit Number 85 was received
3 into evidence.)

4 THE WITNESS: Thank you very much.

5 THE COURT: It is 12:09. I think we can take
6 lunch now. Let's come back at 1:10 p.m.

7 (Whereupon, a luncheon break was taken.)

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1 MONDAY, AUGUST 28, 2023 - - AFTERNOON SESSION

2 THE COURT: Let's come to order. On the record.

3 I'll swear in the witness on the stand.

4 Please raise your right hand.

5 LYNNE McBRIDE,

6 Being first duly sworn, was examined and

7 testified as follows:

8 THE COURT: Okay. Who's got direct? Do we have
9 direct of this witness?

10 MS. TAYLOR: Your Honor, Ms. McBride is here much
11 like Mr. Cryan. She's a -- with California Dairy
12 Campaign. They are a proponent of one of the proposals,
13 but she's not represented here by counsel.

14 THE COURT: Very well.

15 MS. TAYLOR: So you and I can maybe help her out.

16 THE COURT: Why don't you do -- you probably have
17 it better -- better memorized by now.

18 MS. TAYLOR: I don't know about that.

19 THE COURT: Ms. Taylor will ask you just a few
20 preliminary questions, such as identifying yourself,
21 address, and that type of thing.

22 BY MS. TAYLOR:

23 Q. All right. Good afternoon.

24 A. Good afternoon.

25 Q. Can you please state and spell your name for the
26 record?

27 A. Lynne, L-Y-N-N-E, McBride, M-C-B-R-I-D-E.

28 Q. And can you state your business address?



1 A. 325 Mitchell Avenue in Turlock, California, 95380.

2 Q. You can read your statement in now for the record.

3 I will just ask you to be cognizant that the court
4 reporter is transcribing what you say, so we try to keep
5 it not quick.

6 A. Great.

7 THE COURT: Let's go ahead and mark Ms. McBride's
8 statement, which is updated, California Dairy Campaign-1,
9 let's mark that with the next exhibit in order, which I
10 have as 86.

11 (Thereafter, Exhibit Number 86 was marked
12 for identification.)

13 THE COURT: Very well. Exhibit -- the so
14 designated exhibit is marked for identification as 86.

15 Ms. McBride, you may give your statement.

16 MS. TAYLOR: For those listening, we don't have
17 extra paper copies. It is up on the website as CDC-1. It
18 is seven pages.

19 MR. ENGLISH: I request a copy. It's a lot harder
20 to do online.

21 THE COURT: Let's go off the record.

22 (Off-the-record.)

23 THE COURT: Back on the record.

24 Do I understand that there are additional exhibits
25 that this witness will be sponsoring, other than her
26 statement, which is Exhibit 86?

27 MS. TAYLOR: Yes, your Honor. CDC submitted to
28 the Department, according to the advance admissions



1 schedule, exhibit schedule, ten exhibits in total. All of
2 them are online. We only have the paper copy of one
3 today, but Ms. McBride indicated she would bring paper
4 copies of the other nine tomorrow morning so they could be
5 put officially in the paper record. We would like to
6 reserve Exhibit Numbers 87 through 95 so we can mark those
7 accordingly in the morning.

8 THE COURT: 87 through 95?

9 MS. TAYLOR: Yes.

10 THE COURT: Hearing exhibits are reserved.

11 All right. Let's just -- yes, Mr. Rosenbaum.

12 MR. ROSENBAUM: Well, your Honor, if this -- if
13 this is the opportunity to cross-examine this witness,
14 then I'm going to want to be able to do that. I mean, I
15 printed off copies from the web page. But I think we
16 should go ahead and assign Hearing exhibit numbers to
17 the -- to each of the exhibits so that we can go ahead and
18 do that cross-examination.

19 THE COURT: That's -- that's fair. And I -- I
20 guess I had really proposed to see how this goes, and if
21 someone feels disadvantaged by not having a hard copy
22 until tomorrow, we'll recall this witness, I suppose.
23 Either that or we could take up this witness later.

24 But what do the parties propose?

25 Mr. English seems to be concerned about not having
26 hard copies.

27 MR. ENGLISH: I -- I just wanted to make sure --
28 since I understood there was an updated one, the website



1 wouldn't help. I'm prepared to use my computer with
2 respect to the exhibits. We'll just have to make sure at
3 that time we have numbered them so we're referring to them
4 correctly, that's all. But I'm prepared to move forward.
5 I'm not saying that we should postpone this witness. I
6 can't speak for others, but that's how --

7 THE COURT: Yes. Thank you, Mr. English.

8 Any --

9 MS. TAYLOR: CDC-1 on the website is updated.

10 Ms. McBride sent it this morning, and we have replaced
11 online what was submitted earlier. So it is the correct
12 version, just so everyone knows. Yeah.

13 THE COURT: Okay.

14 MS. TAYLOR: I'm happy to go through the names of
15 the exhibits if you would like.

16 THE COURT: Yeah, I think you should. It would
17 save me getting -- all right. And that -- and since we
18 will identify -- well, essentially mark -- well, virtually
19 mark, identify exhibits without introducing them into the
20 record right now. The remainder of the exhibits which
21 will hit tomorrow for this witness, and they won't put
22 anybody at any disadvantage if they have got a problem
23 with this tomorrow.

24 The floor is yours, Ms. Taylor.

25 MS. TAYLOR: Okay. It looks like CDC Exhibit 2 is
26 labeled Table 30, US Mozzarella Production in Wisconsin
27 Wholesale Prices, 2000 to 2023. And that should be
28 marked -- ask to be marked Exhibit 87.



1 (Thereafter, Exhibit Number 87 was marked for
2 identification.)

3 MS. TAYLOR: CDC Exhibit Number 3 titled Requested
4 Mozzarella Information for California Dairy Campaign
5 Provided April 2023 should ask to be marked 88.

6 (Thereafter, Exhibit Number 88 was marked for
7 identification.)

8 MS. TAYLOR: CDC Exhibit Number 4 entitled
9 June 2007 Spot Cheese Market. It's a one-pager from the
10 Government Accountability Office, ask to be marked
11 Exhibit 89.

12 (Thereafter, Exhibit Number 89 was marked for
13 identification.)

14 MS. TAYLOR: CDC Exhibit 5 is an exhibit from the
15 Congressional Research Service entitled Consolidation and
16 Concentration in the U.S. Dairy Industry, dated
17 April 27th, 2010. Ask that to be marked as Exhibit 90.

18 (Thereafter, Exhibit Number 90 was marked for
19 identification.)

20 MS. TAYLOR: CDC Exhibit Number 6 is a three-page
21 document entitled The United States Department of
22 Agriculture, In the Matter of: Milk in the Northeast and
23 Other Marketing Areas, docket number AO-14-A69, pages 641,
24 and then it skips to 668. Ask that to be marked as
25 Exhibit 91.

26 (Thereafter, Exhibit Number 91 was marked for
27 identification.)

28 MS. TAYLOR: CDC Exhibit Number 7 is on the header



1 for National Farmers Union entitled Family Farming and
2 Dairy Policy Reform, 2023 Special Order of Business. It
3 is a two-page document. Ask that to be marked Exhibit 92.

4 (Thereafter, Exhibit Number 92 was marked for
5 identification.)

6 MS. TAYLOR: CDC Exhibit Number 8 -- it is
7 loading, sorry. Okay. It is a 62-page document entitled
8 Prediction of Mozzarella Cheese Yield from Milk
9 Consumption, from Hamzah M. Abu-Tarboush, from Utah State
10 University. Ask that to be marked Exhibit 93.

11 (Thereafter, Exhibit Number 93 was marked for
12 identification.)

13 MS. TAYLOR: CDC Exhibit Number 9 is the USDA
14 Specifications for Mozzarella Cheese, effective
15 September 24th, 2012, reprinted in December of 2018. Ask
16 that to be marked Exhibit Number 94.

17 (Thereafter, Exhibit Number 94 was marked for
18 identification.)

19 MS. TAYLOR: And lastly, CDC Exhibit 10 is a
20 four-page document dated March 1st, 2023, titled Purchase
21 Award Description, for mozzarella PCA. It's a four-page
22 document. And we ask that to be marked Exhibit 95.

23 (Thereafter, Exhibit Number 95 was marked for
24 identification.)

25 MS. TAYLOR: And that looks to be all of their
26 exhibits.

27 THE COURT: The identified exhibits are so marked.
28 I think we can proceed with this witness's



1 statement.

2 Ms. McBride, you can read and/or summarize your
3 statement, which is Exhibit 86.

4 THE WITNESS: Great.

5 THE COURT: The floor is yours.

6 THE WITNESS: Thank you, your Honor.

7 Good afternoon. My name is Lynne McBride, and I
8 serve as executive director of the California Dairy
9 Campaign. Founded over 25 years ago, CDC is a grass roots
10 organization representing dairy farmers throughout
11 California.

12 The California Dairy Campaign Board of Directors
13 voted to -- oh, excuse me. I skipped a line.

14 Our office is located in Turlock, California, in
15 the heart of the Central Valley of California. The
16 California Dairy Campaign Board of Directors voted to
17 approve a proposal to add mozzarella to the Class III
18 pricing formula during our annual meeting in Hanford,
19 California, on January 12th, 2023.

20 THE COURT: I'm sorry. Can you give a mailing
21 address, a non-personal address for yourself for the
22 record.

23 THE WITNESS: Oh, 325 Mitchell Avenue in Turlock,
24 California. 95380.

25 THE COURT: Thank you. You may continue where you
26 left off.

27 THE WITNESS: CDC is a member organization of the
28 California Farmers Union, a state chapter of the National



1 Farmers Union, a farm organization representing more than
2 230,000 farmers and ranchers nationwide.

3 I would like to begin by speaking about the
4 special order of business passed during the National
5 Farmers Union convention in San Francisco, California,
6 earlier this year.

7 California Dairy Campaign and California Farmers
8 Union leaders worked with dairy farmers from across the
9 country to finalize the NFU special order titled Family
10 Farming and Dairy Policy Reform, 2023 Special Order of
11 Business.

12 Quote: "Although milk prices paid to dairy
13 farmers improved in 2022, feed prices and input costs
14 reached record highs, reducing dairy farm profitability.
15 Since 1992, the number of US dairy farms has decreased by
16 77%" --

17 (Court Reporter clarification.)

18 THE WITNESS: Oh, yes. Sorry.

19 "Since 1992, the number of U.S. dairy farms has
20 decreased by 77% or more than 103,577 farms due to low
21 dairy farm margins. To reduce dairy farm closures and
22 improve the outlook for U.S. dairy farmers, we call on
23 Congress to pass a farmer-led incentive-based milk
24 production growth plan to match milk supply with
25 profitable market demand.

26 "As a result of widespread market concentration
27 and consolidation, dairy farmers have little, if any,
28 choice about where to ship their milk, further depressing



1 milk prices paid due to a lack of competition. The
2 Federal Milk Marketing Order system was set up in the
3 1930s to establish minimum prices paid to dairy farmers
4 and guard against non-competitive and predatory practices
5 of milk handlers.

6 "Prior to the establishment of the Federal Milk
7 Marketing Order system, dairy farmers around the country
8 were at the mercy of milk handlers who controlled milk
9 prices paid. Because milk is a highly perishable product
10 that must leave the farm each day, Federal Milk Market
11 Order regulations are vital to ensure dairy farmers are
12 paid a minimum price for the milk they produce.

13 "The last Federal Order hearing to consider
14 significant changes in the pricing formulas occurred
15 15 years ago, and the dairy market has grown dramatically
16 more concentrated since then, making Federal Order minimum
17 milk pricing more critical than ever before.

18 "Dairy farmers do not have the ability to change
19 milk handlers given the level of consolidation and
20 concentration that exists today. Therefore, minimum milk
21 prices must ensure that dairy farmers are paid a price
22 that reflects the value of all milk and dairy products
23 sold to sustain dairy farmers and foster a secure food
24 supply for consumers," unquote.

25 The special order of business later supports,
26 quote, "reforming all class formulas to reflect the value
27 and volume of all dairy products sold in the market today
28 as current milk pricing formulas fail to reflect the



1 actual market value of dairy products, particularly high
2 moisture and higher value cheese products," unquote. And
3 that's Exhibit 7.

4 THE COURT: What Exhibit 7, is that your -- is
5 that CDC-7?

6 THE WITNESS: CDC Exhibit 7. Excuse me.

7 THE COURT: That is now 92 marked for
8 identification. Thank you.

9 THE WITNESS: Federal Milk Marketing Orders
10 (FMMOs) were established to stabilize the milk market and
11 help equalize the market power of dairy farmers with dairy
12 processors. In effect, the Federal Milk Marketing Order
13 system exists to protect dairy farmer from dairy
14 processors. We consider it important to recall the
15 importance of Federal Orders to dairy farmers throughout
16 history as proposals for changes are considered.

17 Before moving on to the specifics of our proposal,
18 it is important to consider the crisis dairy farmers face
19 today due to milk prices falling well below production
20 costs. The United States Department of Agriculture (USDA)
21 National Agricultural Statistics Service (NASS) reporting
22 indicates that the number of dairy farms has dropped by
23 more than 60% since 2000.

24 Many leaders in our organization have been forced
25 to sell their entire dairy operations because milk prices
26 paid failed to come close to covering the average cost to
27 produce milk today. California Dairy Campaign publishes a
28 monthly milk pricing survey of approximately 40 dairy



1 producers who report their prices, including milk
2 components each month from a variety of milk handlers.

3 Although the numbers are still coming in, it is
4 evident that the net price paid will total approximately
5 \$14 per hundredweight, an abysmally low price. Our latest
6 pricing survey shows milk prices are well below average
7 production costs.

8 In July, the statistical uniform price in
9 California totaled 15.53 per hundredweight, while the
10 average cost of production in our state totals more than
11 \$23 per hundredweight, according to the latest United
12 States Department of Agriculture (USDA) Economic Research
13 Service (ERS) Milk Cost of Production Estimates.
14 Nationally, the average cost of production totals more
15 than \$27 per hundredweight, according to the same USDA ERS
16 estimate.

17 In short, multi-generational dairies are going out
18 of business in droves due to depressed milk prices,
19 particularly Class III prices which have fallen this year.
20 Our monthly milk pricing survey shows how Class III
21 shippers are paid significantly less than dairy producers
22 shipping to handlers of other classes.

23 Although Class III prices rose significantly in
24 2020, they have remained below Class IV prices for a
25 prolonged period. As we sit here today discussing the
26 specifics of milk pricing formulas, dairy farmers around
27 the country are facing economic ruin due to high input
28 costs and milk prices comparable to those paid decades



1 ago.

2 Dairy farmers want to get off the roller coaster
3 of volatile and chronically depressed milk prices. An
4 increase in the manufacturing cost allowance, as called
5 for in multiple proposals before this hearing, will
6 exacerbate the crisis dairy farmers face.

7 Then there's a graph in there from the Economic
8 Research Service showing milk production and number of
9 dairy farms from 2017 to 2022, and it -- it shows the
10 decline in the number of dairy farms there.

11 Since it began, we have participated in Dairy
12 Together, a nationwide effort of dairy farmers from across
13 the country calling for a nationwide farmer-led
14 incentive-based dairy growth management plan that would
15 match milk production with profitable market demand.

16 An effective growth management plan would improve
17 the outlook for dairy farmers nationwide. We understand
18 and appreciate that it is the role of Congress to change
19 the direction of federal dairy policy to establish
20 incentives for milk production to more closely align with
21 market demand. However, during this hearing much time
22 will be devoted to proposals that would increase the
23 manufacturing cost allowance or Make Allowance. An
24 increase in the Make Allowance will make our nationwide
25 supply/demand imbalance even worse than it is today.

26 In the absence of a dairy growth management plan,
27 today, we have a patchwork across the country of plans
28 that send strong signals to dairy producers about how much



1 milk to produce and some that don't. That patchwork is
2 failing. The evidence is the volatile and chronically
3 depressed milk prices paid to dairy farmers nationwide.

4 An increase in the Make Allowance will make plants
5 less responsive to changes in market conditions and less
6 inclined to send signals to dairy farmers about how much
7 milk to produce. We oppose any increase in the
8 manufacturing cost allowance proposed for this hearing.

9 Milk handlers need to look further up the food
10 chain to cover their costs, not saddle dairy producers
11 with higher manufacturing cost allowances. Even worse,
12 one proposal aims to update the cost allowances more
13 frequently. We had a system in California that included
14 frequent updating of Make Allowances, and it led to the
15 growth of dairy processing and increases in milk
16 production that was not based on market demand but instead
17 was a direct result of generous Make Allowances.

18 All the extra milk production and processing in
19 California depressed milk prices nationwide, and we oppose
20 a similar attempt proposed at this hearing to ramp up
21 Make Allowances routinely. The current, voluntary,
22 unaudited manufacturing cost surveys relied on to
23 determine manufacturing cost allowances represent a small
24 fraction of the manufacturing plants nationwide. We
25 oppose any attempt to increase the Make Allowance based on
26 these unreliable cost studies.

27 In addition, the current manufacturing cost
28 allowances include a return on investment. Dairy farmers



1 have no similar guaranteed return on investment enjoyed by
2 processing plants. The ROI category is estimated to cost
3 dairy farmers nationwide hundreds of millions of dollars
4 annually and should be removed from the manufacturing cost
5 allowance calculation.

6 Class III Price Formula Undervalues Milk.

7 Our proposal seeks to change the Class III pricing
8 formula to reflect the value of the cheese market today
9 more accurately. The Federal Orders calculate milk prices
10 based on end product prices, and it is essential to
11 include the largest cheese category in the end product
12 price calculation. Our proposal would add a mozzarella
13 price to the protein price included in the Class III price
14 formula. Adding mozzarella to the protein price would
15 make Class III pricing more reflective of the cheese
16 prices paid and yields achieved today. The volume of
17 mozzarella has now significantly exceeded that of cheddar,
18 and the Class III price should be modified to reflect
19 these market conditions.

20 According to the United States Department of
21 Agriculture (USDA) Dairy Products 2022 Summary published
22 in April of this year, Mozzarella production totaled
23 4,497,175,000 pounds, while cheddar totaled 3,963,741,000
24 pounds. Total cheese production in 2022 totaled
25 14.1 billion pounds last year. Mozzarella has surpassed
26 cheddar in total cheese production and should no longer be
27 ignored in the Federal Order pricing formulas.

28 Today's Class III price is based on the price of



1 cheddar cheese, which is produced in lower volumes than
2 mozzarella. A 2007 General Accountability Office Report
3 concluded that the Chicago Mercantile Exchange (the CME)
4 was thinly traded and vulnerable to market manipulation.
5 Prices paid on the CME have an outsized impact on the
6 Agricultural Marketing Service National Dairy Products
7 Sales Report. Although CME sales account for less than 1%
8 of all cheese sales, prices paid on the CME significantly
9 impact the Class III price.

10 The CME spot market is where the last load of
11 product is sold, and it serves as a marketplace of last
12 resort. This market is limited to only a few traders and
13 commercial firms. While the market sometimes moves even
14 without sales volume, the CME greatly influences the price
15 for all cheese and butter across the country because these
16 classes impact all milk prices paid to dairy farmers.

17 Unfortunately, this failing milk pricing system
18 has resulted in dairy farmers suffering economic losses
19 due to volatile milk prices paid that fail to cover
20 average farm operating costs. This hearing presents an
21 opportunity to adopt our proposal and make the Class III
22 pricing formula more market-oriented, accurately
23 reflecting prices paid in today's market. (Exhibit 4)

24 THE COURT: CDC-4 --

25 THE WITNESS: Yes, CDC-4.

26 THE COURT: -- now marked as Hearing Exhibit 89.

27 THE WITNESS: FMMO Hearing 2000 - Mozzarella

28 Ignored in the Pricing Formula.



1 During the Federal Milk Marketing Order hearing in
2 Virginia in 2000, California Dairy Campaign Board Member
3 Joaquin Contente, a dairy producer from Hanford, CA,
4 raised the issue of the importance of mozzarella to
5 calculate the Class III price. During his testimony, he
6 questioned Dr. David Barbano about mozzarella, who
7 confirmed at that time that mozzarella was being ignored
8 in the Federal Order pricing system. (CDC Exhibit 6)

9 THE COURT: Which is now Exhibit 91 for
10 identification.

11 THE WITNESS: Although mozzarella now exceeds
12 cheddar cheese production, no change has been made in
13 Class III to reflect the higher value and higher volume
14 mozzarella market. Since 2000, the demand for mozzarella
15 cheese has grown dramatically. According to a recent HTF
16 report, the mozzarella cheese market is expected to double
17 its revenue size due to strong and steady growth.

18 Despite the higher production of mozzarella and
19 the growth in this cheese variety that is expected to
20 continue, Class III prices ignore this important and
21 growing segment of the cheese market. (CDC Exhibit 3)

22 THE COURT: Now marked for identification
23 Exhibit 88.

24 THE WITNESS: Our proposal seeks to add mozzarella
25 to the National Dairy Products Sales Report (NDPSR) to be
26 included in the protein calculation of the Class III
27 price. The National Dairy Product Sales Report is
28 intended to reflect basic commodity products and should



1 include mozzarella.

2 (Court Reporter clarification.)

3 THE WITNESS: I apologize.

4 The NDPSR is intended to reflect basic commodity
5 products and should include mozzarella. We consider it
6 essential that more dairy products are part of the
7 mandatory dairy pricing survey to improve transparency in
8 the pricing of milk paid to dairy producers.

9 Mozzarella Specifications.

10 According to information from the United States
11 Department of Agriculture, mozzarella has five main
12 specifications. We propose incorporating mozzarella
13 specifications --

14 THE COURT: I'm sorry.

15 THE WITNESS: I know, I changed the words.

16 THE COURT: The statement -- the statement says
17 four. Are you now correcting that to five?

18 THE WITNESS: Yes. Yes.

19 THE COURT: Okay.

20 THE WITNESS: We propose incorporating mozzarella
21 specifications based on the highest production to
22 determine the appropriate moisture and fat content for a
23 standardized mozzarella. Until now, there has been no
24 standard specification for mozzarella cheese. USDA
25 collects data about mozzarella cheese production and can
26 use that information to determine moisture and fat content
27 to establish one. (CDC Exhibit 9)

28 THE COURT: Which has been marked Exhibit 94 for



1 identification.

2 THE WITNESS: Mozzarella production is the largest
3 category of cheese produced today and deserves a standard
4 specification determined by the volume of mozzarella
5 produced today. USDA publishes the volume of mozzarella
6 in the National Agricultural Statistics Service reports,
7 and the specification of the cheese should be made
8 available publicly and utilized in the protein price in
9 the Class III formula. We propose adding mozzarella to
10 the protein price based on the Van Slyke cheese yield
11 formula, which effectively determines cheese yields for
12 mozzarella. (CDC Exhibit 8)

13 THE COURT: Which has been marked Exhibit 93 for
14 identification.

15 THE WITNESS: The end-product pricing formulas
16 should reflect end-product prices in the market today.
17 Mozzarella is the most significant segment of the cheese
18 market, so it should be incorporated into the Class III
19 end-product pricing formula.

20 At our request, USDA has provided an extensive
21 series of information about mozzarella prices paid titled,
22 quote, "U.S. Mozzarella Production and Wisconsin Wholesale
23 Price, 2000 to 2023."

24 The price series documents the higher and more
25 stable wholesale price paid for mozzarella over more than
26 20 years. For example, when dairy producer prices,
27 including Class III, dropped precipitously in 2009 and
28 2010, mozzarella prices remained stable. If mozzarella



1 had been added to the Class III pricing formula back then,
2 it would have improved milk prices paid and fostered more
3 orderly marketing of milk nationwide. (CDC Exhibit 2 and
4 3)

5 THE COURT: Exhibits 87 and 88 marked for
6 identification.

7 THE WITNESS: Concentration and Consolidation
8 Increasing.

9 Our dairy farmer members are concerned about how
10 concentration affects price transparency in dairy pricing.
11 It has undermined price discovery because fewer buyers and
12 sellers are in the market today. (CDC Exhibit 5)

13 THE COURT: Marked Exhibit 90 for identification.

14 THE WITNESS: According to the Congressional
15 Research Service (CRS) Report from 2010 titled
16 Consolidation and Concentration in the U.S. Dairy
17 Industry, quote, Typically, markets work more efficiently
18 when there are many "observable" transactions that provide
19 sufficient information to all market participants about
20 demand, supply, and prices. The move within the dairy
21 industry to a more integrated market, with closer ties
22 between various market players such as custom contracts or
23 other pre-arranged transactions, results in fewer trades
24 of products on the cash or "spot" market. In years past,
25 these sales would account for a greater share of market
26 transactions and provide a good measure of current prices.

27 The primary spot market for dairy is located at
28 the Chicago Mercantile Exchange (CME), where cheese,



1 butter, and nonfat dry milk are traded. Actual quantities
2 traded are quite small, but prices determined by buyers
3 and sellers at this market are used to establish wholesale
4 price contracts across the country, subject to premiums
5 and discounts for factors such as quality and
6 transportation. Wholesale dairy product prices are then
7 used to set monthly minimum prices by USDA that milk
8 handlers must pay for farm milk under federal orders.

9 Some dairy producer groups believe that the CME is
10 an inadequate pricing mechanism because of perceptions
11 that the market is too thinly traded, lacks transparency
12 and sufficient oversight, and creates a highly volatile
13 market that adversely affects producers. The GAO study
14 concluded in 2007 that, quote, "certain market conditions
15 at the CME spot market, including a small number of trades
16 and a small number of traders who make a majority of
17 trades, continue to make this market particularly
18 susceptible to manipulation," unquote.

19 We agree that the CME is an inadequate pricing
20 mechanism because it is thinly traded and vulnerable to
21 manipulation. Adding mozzarella to the protein pricing
22 formula would work to counterbalance the impact of the
23 thinly traded CME market.

24 Profitability Further Up the Food Chain.

25 According to the Congressional Research Service
26 Report, Farm-to-Food Price Dynamics, the time lags in
27 retail price response to farm price changes are generally
28 months long, even for perishables like milk. Another



1 characteristic of food markets is that adjustments in the
2 retail prices from higher farm prices occur faster and
3 with greater passthrough to the consumer than adjustments
4 to decreases in farm prices, an economic phenomenon often
5 referred to as "sticky" retail food prices. Retail prices
6 follow commodity prices upward rapidly but fall back only
7 slowly and partially when commodity prices recede.

8 The CRS report concluded that a "disconnect"
9 exists between farm and retail prices of agricultural
10 products. There is profitability further up the food
11 chain, and dairy producers should not be required to pay
12 more in manufacturing cost allowances to cover plant
13 costs. The profitability further up the food chain
14 ensures that any improvements in minimum milk prices paid
15 to dairy farmers will not impact consumer prices.

16 Support for other proposals:

17 We support Proposal 1, the National Milk Producers
18 Federation Proposal to amend the milk component factors in
19 the Class III and Class IV skim milk pricing formulas;

20 Proposal 4: The American Farm Bureau Federation
21 (AFBF) proposal to add 640-pound cheddar cheese blocks to
22 the protein price formula;

23 Proposal Number 5: The American Farm Bureau
24 Federation proposal to add unsalted butter to the
25 butterfat and protein calculation;

26 Proposal Number 13: The National Milk Producers
27 Federation proposal to amend the base Class I skim milk
28 price in all Federal Orders to return to the "higher" of



1 the Class III and Class IV Advanced Skim milk pricing
2 factor;

3 Proposal 19: The National Milk Producers
4 Federation Proposal to update the Adjusted Class I
5 differentials;

6 And Proposal 21: The American Farm Bureau
7 Federation Proposal to update the Class II differential.

8 As stated before, the California Dairy Campaign
9 opposes increases in the manufacturing cost allowances
10 included in Proposals 7 by the National Milk Producers
11 Federation, 8 by the Wisconsin Cheese Makers Association,
12 and 9 by the International Dairy Foods Association.

13 In conclusion, our proposal aims to improve
14 overall dairy price transparency by expanding the United
15 States Department of Agriculture's mandatory price
16 reporting system to add additional products like
17 mozzarella. Given the concentration and consolidation
18 that exists, minimum prices paid by the Federal Milk
19 Marketing Order system are critical to ensure dairy
20 farmers are paid prices based on current market
21 conditions.

22 In addition, we oppose an increase in the
23 manufacturing cost allowance because it will further
24 reduce milk prices paid to dairy farmers who are already
25 enduring milk prices well below production costs. If
26 anything, Make Allowances should be lowered to eliminate
27 return on investments because farmers do not have a
28 similar guarantee or any certainty that their costs will



1 be covered in minimum milk pricing formulas.

2 On behalf of the California Dairy Campaign, I
3 thank you for the opportunity to testify today. I would
4 like to request the ability to submit additional written
5 testimony on a range of subjects important to dairy
6 farmers for consideration during this hearing.

7 THE COURT: Mr. Rosenbaum.

8 Actually, before we get there, does anyone think
9 it's important that we make a more formal correction to
10 the testimony on page 5 about the four, now five, main
11 specifications for mozzarella?

12 Hearing none, I think we'll just leave the record
13 as it is.

14 Mr. Rosenbaum, your witness.

15 CROSS-EXAMINATION

16 BY MR. ROSENBAUM:

17 Q. Good afternoon, Steve Rosenbaum for the
18 International Dairy Foods Association.

19 Are you generally aware that under the Federal
20 Order system, minimum prices are established by surveying
21 the finished product price and then subtracting the cost
22 of making that finished product?

23 A. Yes.

24 Q. Now, I -- what I'm not seeing anywhere in any of
25 these documents, but correct me if I'm wrong, is any
26 information as to what in fact it costs to make
27 mozzarella.

28 Is -- does that appear some place?



1 A. Yeah. That is something in our proposal that we
2 included the standard Make Allowance cost, but that's
3 certainly something we would be interested in calculating
4 what mozzarella cost of production would be. And that's
5 sort of -- that is definitely one of the challenges with
6 the cost studies overall is the ability to get information
7 from plants about what their costs actually are. And so
8 we definitely would be interested in that information.

9 Q. Are you aware that USDA's decision-making after
10 this hearing has to be based upon the evidence that has
11 been presented at the hearing?

12 A. Yes, I am.

13 Q. And as of this point, at least, there has been no
14 information submitted regarding the cost of making
15 mozzarella; is that correct?

16 A. Yes, we do not have that information. We
17 represent dairy producers, not dairy processors.

18 Q. And are you generally aware that the equipment
19 used to make mozzarella is in some respects the same as
20 the equipment used to make cheddar cheese, but in many
21 other respects is used different?

22 A. We understand it's -- it can be different, yes.

23 Q. Okay. I mean, do you understand, for example,
24 that -- that making mozzarella involves stretching the
25 cheese?

26 A. Yes.

27 Q. And that that's not the case with cheddar, as one
28 example?



1 A. Yes.

2 Q. Okay. So I want to ask you some questions about
3 the -- well -- and -- start that question again.

4 And obviously there's no evidence in the record as
5 to what the cost of that mozzarella specific equipment is;
6 is that correct?

7 A. Right. We just don't have access to that type of
8 information. Again, we represent dairy producers who see
9 that mozzarella production number, and really think it's
10 important for that to be included in the Class III price.

11 Q. Okay. Well, let's -- I want to ask some specific
12 questions about some of the data you did present.

13 If you could look at your CDC Exhibit 2, which has
14 been marked as Hearing Exhibit 87.

15 A. Yes.

16 Q. Now, this is information, according to the
17 footnotes at the last page, that come from USDA NASS in
18 some respects and in others from Dairy Market News,
19 correct?

20 A. Yes. That's our understanding.

21 Q. So let's just take the information in the very
22 first line on the very first page, which shows in
23 January 2000 -- and I'm just using this as an example; I
24 know it's long time ago, but it's the first one -- where
25 you show mozzarella production of 215,333,000 pounds,
26 correct?

27 A. Yes.

28 Q. Just asking you to -- that I'm reciting the



1 numbers correctly. Nothing beyond that at this point.

2 And you show a price range there from \$1.5460 to
3 \$2.2150, correct?

4 A. Yes.

5 Q. And then there's an average price shown, correct?

6 A. Yes.

7 Q. Now, I mean that's a -- that's a very large range
8 in price in one --

9 A. Uh-huh.

10 Q. -- single month, you agree, right, I mean, between
11 \$1.54 and \$2.21?

12 A. Yes.

13 Q. And do you have any -- okay. And -- and in the
14 last column, the average price, do you agree with me the
15 average price as shown on this exhibit is simply the --
16 you just take -- have taken the minimum price and the
17 maximum price, added them together, and divided by two?

18 A. Yes. So this information was what we had
19 requested from the United States Department of Agriculture
20 when we were at the beginning of our discussions about
21 whether to pursue a mozzarella inclusion in the Class III
22 formula. And so, you know, that's basically the table
23 that we were given. One of the challenges that we have
24 moving forward in this proposal is the limited amount of
25 data. But we found this to be helpful, and that's why we
26 wanted to submit it for the record.

27 Q. But just to be clear, your average price is,
28 simply, the midpoint between the minimum price and the



1 maximum price, correct?

2 A. That's our understanding based on the information
3 we were given, yes.

4 Q. It is not a weighted average, correct?

5 A. For my understanding, it isn't.

6 Q. So you don't know whether -- and I'm going to use
7 an extreme example, and I'm not saying this example is
8 right either. But you don't know whether 99% of the sales
9 were for \$1.54 and only 1% were for \$2.2150, correct?

10 A. Yeah. That's why we would like more information
11 about mozzarella.

12 Q. And if you look at the last page where you have
13 the footnotes, where you provide source information -- let
14 me back up. The -- if you look at the very title of the
15 document, it shows that mozzarella production is the
16 information you got from NASS, and Wisconsin wholesale
17 prices is the information you got from Dairy Market News,
18 correct?

19 A. Yeah. And, again, this was prepared by USDA AMS
20 Dairy Programs.

21 Q. Okay. And -- and in terms of the price,
22 footnote 2 tells us that this is the price of 5- to
23 6-pound mozzarella loaves, correct?

24 A. Right. Correct.

25 Q. Which is that's like the package that gets
26 delivered to a pizza parlor, right? Or do you know?

27 A. Well, it is the -- again, we asked for the
28 information, and this is what we were given in terms of



1 what's available. And that's one of our concerns --

2 Q. So is --

3 A. -- is that we don't have the pricing information
4 that we think is important.

5 Q. So as far as you know, that's the only
6 available -- only available information you have is the
7 highest price paid and the lowest price paid in a given
8 month for a 5- to 6-pound piece of mozzarella cheese?

9 A. Yeah. And that's why we're -- we're in our
10 proposal asking for mozzarella to be added to the National
11 Product Dairy Sales Report.

12 Q. Well, so -- you are not suggesting these numbers
13 in any way are reflective of what mozzarella cheese sells
14 for at a bulk level to the extent it is sold at bulk?

15 A. Well, again, it is limited information. So in
16 preparation for this hearing, we wanted to provide as much
17 information as we could.

18 Q. Okay. So let me then ask you a question about CDC
19 Exhibit 3, which has been marked as Exhibit 88.

20 And -- and there -- this is -- this is information
21 about production, correct?

22 A. Correct. Again, it was at our request that USDA
23 provided this information, so we thought it would be
24 important, again, because of the limited amount of
25 information we have about mozzarella, to include it in the
26 hearing record.

27 Q. Okay. And this exhibit has a footnote 1, and
28 frankly, I'm a little puzzled by what the footnote means,



1 so if you could help me out.

2 It says -- starts by -- it says, "Source: USDA
3 AMS Dairy Market News." And then a footnote to that,
4 which is footnote 1, says, "Due to reduced personal
5 contacts, first-person reporting is no longer used to
6 report mozzarella prices."

7 What does that mean?

8 A. That was, again, provided to us by AMS. So I'm
9 not sure I can speak to that.

10 Q. That's a -- that's a -- is that a written
11 statement? Because I'll be candid, we can't find anything
12 like that statement in USDA AMS Dairy Market News itself.
13 So is this some sort of private communication or what
14 exactly is it?

15 A. Yeah. Again, we were requesting information from
16 AMS, and this was what was provided to us, so --

17 Q. Okay. All right. So do you understand that to
18 mean that, in fact, these prices as reported here are not
19 based upon that -- any information reported by the seller
20 or the buyer?

21 A. Yeah, I just understood that there was reduced
22 personal contacts, just as it says there.

23 Q. Okay. So do you know where it comes from? If it
24 is not first-person personal contacts, do you know where
25 the information is coming from?

26 A. I guess at this point I don't have that
27 information.

28 Q. Okay. And then it says, "The prices reported are



1 adjusted week to week based on the CME Cash Futures
2 settlement."

3 Do you see that?

4 A. Uh-huh.

5 Q. Do you -- do you know what cash futures are being
6 discussed there?

7 A. Yeah. Again, this was information that we
8 requested and was provided to us, so --

9 Q. You don't --

10 A. -- I can't speak to that.

11 Q. Do you know if this is Class III futures prices or
12 do you --

13 A. Again --

14 Q. Okay. Do you know whether mozzarella generally
15 has a shorter shelf life than cheddar?

16 A. Well, again, you know, we're interested in more
17 information about mozzarella. I represent dairy
18 producers, and we don't have, you know, in-depth
19 information about cheese characteristics.

20 Q. All right. And you have identified five different
21 standard -- let me start that question again.

22 You have identified five different FDA standards
23 of identity for mozzarella; is that correct?

24 A. Yes. And that is in one of our exhibits.

25 Q. Yes. I saw that.

26 And -- and you have not selected, to the extent
27 that mozzarella were ever to be included in the pricing
28 formulas, you have not determined which form of mozzarella



1 you would be advocating?

2 A. No. At this point we don't have enough
3 information to do that.

4 Q. And do you know whether there's any general
5 relationship between the differences between the standards
6 and the difference between the prices at which they are
7 sold in the marketplace today?

8 A. Yeah. Again, we were interested in more pricing
9 information about mozzarella, so we can't speak to that.

10 Q. The one specific information that you provided
11 regarding a specific price for mozzarella is set forth in
12 here in Exhibit 95, correct? This is your -- I'm sorry,
13 this is your CDC Exhibit 10.

14 A. Okay.

15 Q. Your last exhibit.

16 A. Yes. That was just another -- in terms of the
17 limited price information we were able to gather, we
18 thought it was important in preparation for this hearing
19 to include that.

20 Q. Okay. And just -- and this is information
21 relating to a -- I'll call it a request for proposal. I'm
22 not sure that's quite the term used here, but request for
23 proposal by the -- by the government for -- for the supply
24 of certain mozzarella product, correct?

25 A. Correct.

26 Q. And you -- and am I -- am I correct in looking at
27 this that if you look on the first page under the heading
28 "Purchase Summary," the word "material," do you see that



1 the material at issue there was string cheese?

2 A. Yes.

3 Q. And which necessarily means that this is cheese
4 that after it's been made has been run through whatever
5 stretching or forming equipment is necessary to get it
6 down to a one-ounce size?

7 A. Yeah.

8 Q. And --

9 A. And, again, just the reason why we included this
10 in our testimony was because it was part of the limited
11 information we were able to gather.

12 Q. I understand. But there's certain pricing
13 information, so we should all know what the pricing
14 information relates to.

15 So it's string cheese. And do you see that it's
16 string cheese that has been cut and packaged into
17 one-ounce --

18 A. Uh-huh.

19 Q. -- pieces, correct?

20 A. Uh-huh.

21 Q. You have to say yes or no --

22 A. Yes.

23 Q. -- for the reporter. Thank you.

24 And so not only have -- has the whoever provides
25 this -- whoever won the bid, not only had to stretch it
26 and put it in a string form, but also had to cut it into
27 one-ounce pieces and package it individually, correct?

28 A. Yes.



1 Q. And then -- and then, also, am I correct that the
2 prices that are indicated in this document are prices that
3 reflect -- they are delivered prices?

4 A. Right.

5 Q. And in fact, they are delivered prices, if you
6 look at, I don't know, 40 or so --

7 A. Right.

8 Q. -- different locations all around the --

9 A. Yes.

10 Q. -- locations around the United States?

11 And does it appear that the number of boxes being
12 provided, you know, 40 boxes of 360-ounce strips per box
13 are going to Birmingham and --

14 A. Uh-huh.

15 Q. -- 400 to Huntingdon, Pennsylvania, and etcetera,
16 all around the country?

17 A. Yes.

18 Q. Is it fair to say these are delivered prices for
19 what are known as less-than-truck-load --

20 A. Yes.

21 Q. -- deliveries?

22 A. Again, we were -- you know, just back to what I
23 said earlier, we were interested in providing as much
24 mozzarella pricing data as we had in preparation for this
25 proposal.

26 MR. ROSENBAUM: That's all I have at this time,
27 your Honor.

28 THE COURT: Further cross?



1 CROSS-EXAMINATION

2 BY MR. MILTNER:

3 Q. Hi, I'm Ryan Miltner. I represent Select Milk
4 Producers.5 I would like to start with some questions about
6 your statement, and the first one I think is a
7 clarification. And I got to admit, I was jotting down my
8 questions while Mr. Rosenbaum was asking, so if this is a
9 duplicate, I apologize.10 But on the first page, third paragraph, you refer
11 to "since 1992, the number of U.S. dairy farms has
12 decreased by 77%."13 When I look at CDC Exhibit 7, which is that policy
14 statement, I think it is 79 in there.

15 A. Correct.

16 Q. Okay.

17 A. And that was something that I -- there was a --
18 you know, the correct number is 77.19 Q. Okay. I just wanted to make sure that -- that we
20 had that clear on the record. So thank you very much.21 On page 2, you talk about a monthly milk pricing
22 survey that CDC publishes.

23 A. Uh-huh.

24 Q. I did not see that survey or reference to it in
25 any of the exhibits.26 Was any of that information included in your
27 exhibits?

28 A. No, it wasn't. Yeah, that's something that we



1 publish among our membership and circulate among our
2 membership.

3 Q. Okay. So it is published just for the members of
4 the organization?

5 A. Right. So that they can understand what prices
6 are being paid by various milk handlers. And then we as
7 an organization, it really gives us a sense of what actual
8 milk prices are in terms of what our members are being
9 paid.

10 Q. Sure.

11 That's not available on your website or anything
12 like that?

13 A. No.

14 Q. Okay. In that same paragraph on page 2 of your
15 statement, you -- you state, "Although the numbers are
16 still coming in, it is evident that the net price paid
17 will total approximately \$14 per hundredweight, an
18 abysmally low price."

19 I agree, it's abysmally low. Is that in reference
20 to July's milk prices?

21 A. Yes.

22 Q. Okay. On page 3, and I think it's also referenced
23 earlier in the statement, you talk about "Dairy Together,
24 a nationwide effort of dairy farmers from across the
25 country, calling for a nationwide, farmer-led,
26 incentive-based dairy growth management plan that would
27 match milk production with profitable market demand."

28 Can we categorize that as a national supply



1 management program?

2 A. I think we -- what -- as a member of the Dairy
3 Together coalition, we have been there since it began now
4 years ago, and it encompasses both Farmers Union members,
5 Farm Bureau members, independent dairy farmers from around
6 the country, belonging to a number of co-ops.

7 I think one of the important objectives of the
8 coalition is to ensure that dairy farmers can grow their
9 milk production, but only when it makes sense, when it can
10 be matched with profitable market demand. And I think
11 some of the suggestion on a supply management plan is
12 different than that. We want to grow when it is smart to
13 grow and when the market's demanding it and there's -- and
14 so that's why we think it is important to make that
15 distinction, not to call it a supply management plan but a
16 dairy growth management plan.

17 Q. Is the intent behind that program to -- to lower
18 the milk supply in the country and, therefore, drive
19 prices up for producers?

20 A. I mean, not necessarily. It would depend on
21 what's happening in the market, and if there's a demand
22 for milk, then, you know, that certainly would be -- a
23 plan would ensure that that milk would be produced. But
24 we just think it is really important to balance milk
25 production with profitable market demand. Very small
26 changes in milk production have tremendous impacts on the
27 milk price paid. And when there's even a slight excess or
28 oversupply of milk, it can have a really detrimental and



1 devastating impact on the milk price paid to dairy
2 farmers.

3 Q. On the following page, so I'm looking at page 4
4 near the top, and you are describing California's now
5 defunct processing system or pricing system.

6 And you state you state that "the updating of
7 their Make Allowances caused increases in milk
8 production," and I would like to understand that a little
9 more.

10 A. Yeah. That was -- that's been a longstanding
11 concern of our membership was under our state order, there
12 were routine updating of our Make Allowances or
13 manufacturing cost allowances. And there was a concern
14 that that was sending an artificial signal to plants to
15 increase their production, leading to an imbalance.

16 So that's -- that was part of our state system and
17 part -- you know, a big reason why we wanted to -- one of
18 the major reasons why we wanted to join the Federal Milk
19 Marketing Order system is there would be more stability in
20 certainty and alignment between our Make Allowances paid
21 in California as well as those in the Federal Milk
22 Marketing Order system. Also, the prices paid in
23 California are now in alignment with prices paid in the
24 Federal Milk Marketing Order system.

25 So we think Make Allowances can have a detrimental
26 impact if they are too high, and that's why, again, for
27 this hearing we're opposing any increase in the
28 manufacturing cost allowance because we think that it



1 could lead to more of an imbalance in supply and demand.

2 Q. So I could understand why Make Allowance increases
3 would result in perhaps a more hospitable environment to
4 increase milk processing.

5 A. Uh-huh.

6 Q. As I read your sentence here, "the updating of
7 Make Allowances increased milk production."

8 Is that -- are you referring to farm production
9 there, that it drove producers to make more milk?

10 A. Well, I think it does have an impact in terms of
11 when there's a Make Allowance in place, it makes plants
12 less responsive to changes in market demand because they
13 do have that --their costs accounted for. And so I think
14 the point we were aiming to make in that statement was to
15 show that we need to have our milk production in alignment
16 with market demand.

17 Q. I want to talk more about Proposal 6, which --
18 which is the number that -- number of proposal that USDA's
19 put to CDC's mozzarella proposal.

20 And you in -- both in your statement and in your
21 exhibit, you refer back to a 2000 hearing which ended up
22 in a 2002 final decision.

23 A. Correct.

24 Q. At which there was a whole bunch of testimony and
25 evidence about how to create this end product pricing
26 formula, correct?

27 A. Correct.

28 Q. Are you familiar with that hearing in general?



1 A. Yes.

2 Q. Okay. At that point, CDC was a member of the
3 Western States Dairy Producers Trade Association, correct?

4 A. Yes.

5 Q. And the Western States group had a number of
6 proposals as part of that hearing, correct?

7 A. I would have to recall those, perhaps.

8 Q. Okay. Well, let's talk specifically about your
9 reference to Dr. Barbano's testimony.

10 A. Uh-huh.

11 Q. Exhibit 6 -- well, your heading here at the top of
12 page 5, you said, "Mozzarella was ignored in the pricing
13 formula."

14 Was it really ignored, or was it just not included
15 at the end?

16 A. Well, I thought it was, you know, important the
17 way it was stated there, that it was not even a
18 consideration during that hearing. So I think ignored
19 would be more appropriate. And so that's why at this
20 hearing we think it's really important to introduce adding
21 mozzarella as an important factor in the Class III.

22 Q. Do you have a copy of CDC's Exhibit 6 with you?

23 A. No.

24 Q. Okay. I don't either, but I have it on the
25 screen.

26 A. Oh, good. So do I.

27 Q. Okay. Good.

28 I'm looking at that -- that exhibit is three



1 pages, right?

2 A. Correct.

3 Q. Okay. At the bottom portion of the second page,
4 I'm going to begin at line 14 -- and this is Joaquin
5 Contente asking the question --

6 A. Right.

7 Q. -- of Dr. Barbano: "Do you feel that the current
8 Class III pricing, end product pricing system, reflects
9 the true value of mozzarella?"

10 "Answer: I don't think the current system is
11 intended or even attempts to do that. The current system,
12 as I understand it, for establishment of the minimum
13 Class III price, is focusing exclusively on cheddar cheese
14 and ignores mozzarella cheese.

15 "Question: Would you have any recommendation on
16 how to correct the situation?"

17 "Answer: I'm not sure that for the Class III
18 price that there's any correction for the minimum
19 Class III price. I think cheddar is the appropriate
20 product."

21 So my question is, if -- if Dr. Barbano's
22 statement then was that cheddar was the appropriate
23 product, why is mozzarella an appropriate product to
24 include in the formula now?

25 A. Yeah. I mean, I think now 23 years later we have
26 really looked at this, and we have thought of different
27 ways to approach adding mozzarella to the formula. And so
28 that's why we think it is important to add it to the



1 protein price in the Class III instead of, as was
2 suggested towards the end of this exchange here, we think
3 that it's important to include it in the Class III. So
4 that's why our Board of Directors voted to add mozzarella
5 to the Class III, and that's why we are testifying in this
6 regard.

7 We think it is important to bring up the testimony
8 back from 2000 to point out that mozzarella as a category
9 was ignored back then, and so that's why we're pursuing
10 our Proposal Number 6.

11 Q. So as a cooperative of producers -- that represent
12 a cooperative of producers, I think we can commiserate
13 with the situation that CDC is in about accessibility of
14 data to support proposals.

15 A. Uh-huh.

16 Q. I think one of the concerns that we would have
17 with mozzarella is not knowing exactly how to incorporate
18 that into the formula. You have stated a little bit as to
19 how that might be done.

20 A. Uh-huh.

21 Q. Have you or any of CDC's folks thought about the
22 mathematics of how to incorporate mozzarella data into the
23 Class III formula?

24 A. Yeah. And that's why, you know, again, the
25 challenge is getting the right data to move forward in
26 that direction. And then just in terms of back to the way
27 to go about this since 2000, there have been a number of
28 economists who have commented publicly about the



1 importance of adding mozzarella to the Class III. But,
2 you know, as you said, it is challenging given the limited
3 amount of information to go ahead with those types of
4 calculations.

5 Q. I'm trying to find which CDC exhibit it is. It is
6 the one that's a thesis from Utah State University.
7 Exhibit 8.

8 And the author there talks about the Van Slyke
9 formula and using it as a basis to estimate the yield of
10 mozzarella.

11 Have you had a chance to read through the whole
12 thesis?

13 A. Yes.

14 Q. Okay. So you would agree that even though he
15 starts with the Van Slyke formula, he ends up having to
16 modify it relatively significantly to get predictive
17 values for mozzarella, correct?

18 A. Right. But we thought that, overall, the Van
19 Slyke formula in this context would work, and that's why
20 we included this.

21 Q. But if we were -- I guess if -- if we were to take
22 this and use it as a basis to bring mozzarella cheese into
23 the formula --

24 A. Uh-huh.

25 Q. -- it would require -- would you agree that it
26 would require a lot of reworking of the Class III formula
27 to try and tie his formula in with the existing Class III
28 formula?



1 A. No, I wouldn't agree with that.

2 Q. Okay.

3 MR. MILTNER: Thank you very much for answering my
4 questions. I don't have anything else.

5 THE COURT: Thank you, Counsel.

6 More cross aside from AMS?

7 Ms. Hancock.

8 MS. HANCOCK: Thank you, your Honor.

9 CROSS-EXAMINATION

10 BY MS. HANCOCK:

11 Q. Good afternoon, Ms. McBride. I'd just like to
12 start off with saying that National Milk is appreciative
13 of your support for the milk component proposal, the
14 higher-of proposal, and Proposal 19, to update the Class I
15 differentials.

16 I'm curious if you could talk about, based on what
17 I understand to be is your position about updating the
18 protein component formula, it seems to make sense that you
19 would also support the elimination of barrels from the
20 protein calculation for Class III. You didn't mention
21 that in your testimony.

22 A. Yeah. Our -- our position as an organization is
23 that we would like to see more dairy products included in
24 these calculations, and for that reason we did not support
25 that proposal.

26 Q. Okay. And you just didn't include it because you
27 are not actively opposing it, you are just --

28 A. Uh-huh.



1 Q. -- you would like to have the additional
2 components?

3 A. Yes.

4 Q. Is that --

5 A. We would like more dairy products included in the
6 formulas. So we do not support removing it, no.

7 Q. Okay. And are you at all concerned about the --
8 ensuring the consistency with which we track and -- and
9 value those prices?

10 A. Yes, we certainly are.

11 Q. And so having multiple -- multiple products in one
12 as opposed to others, that doesn't offer you any concerns?

13 A. Yeah. Again, that's our policy as an
14 organization, is we would like to see more dairy products
15 included, you know, in these formulas.

16 Q. All right.

17 MS. HANCOCK: I appreciate your time. Thank you.

18 THE WITNESS: Thank you.

19 THE COURT: Anyone else?

20 CROSS-EXAMINATION

21 BY DR. CRYAN:

22 Q. Hi. I'm Roger Cryan with the American Farm Bureau
23 Federation.

24 Hi, Lynne. Nice to see you.

25 A. You too.

26 Q. I should have brought my other glasses. Sorry.

27 So I -- and to sort echo what Ms. Hancock said, we
28 appreciate your support for the proposals, to add the



1 640-pound blocks, which is consistent with your desire to
2 have more products, and our Proposal 5 to add unsalted
3 butter, and for the Class II differential update.

4 The -- some of the things you are supporting seem
5 to be aimed at addressing negative PPDs and depooling.

6 I -- I'm -- I assume that's been a part of the
7 conversation, part of the debate, the discussion at the
8 CDC about moving forward on these things.

9 Could you talk about some of the impacts of that
10 and what's led you to some of these decisions?

11 A. Certainly. Yes. When the proposal to eliminate
12 the higher-of was included in the Farm Bill, we opposed
13 that approach. We were concerned about what the
14 implications of what that would be. And unfortunately,
15 when there was a big split between the Class III and IV,
16 it did lead to those unintended consequences and lowered
17 the Class I price significantly and did lead to negative
18 producer price differentials.

19 Which couldn't have really literally happened at a
20 worse time when it was, you know, 2020, the onset of the
21 pandemic, and then just all this pricing uncertainty that
22 was happening generally, and then to have the Class I
23 issue cause such serious losses, and those are continuing
24 to occur, that it's -- really was of great concern to our
25 membership because, you know, Class I plays an important
26 role in -- in all Federal Orders, and the fact that the
27 strength of the Class I was undermined by this change, you
28 know, it was something that was really concerning to our



1 members during a really difficult time.

2 Q. Thank you.

3 And I assume that you talked about with the
4 mozzarella, that you would like to see more information
5 available to -- to be able to implement that in the
6 protein formulas.

7 A. Yes.

8 Q. Do you think it would be -- it would be better if
9 you had audited mandatory data to -- on processing costs,
10 so -- in order to implement something like that?

11 A. Absolutely. We think that is critical, is that we
12 have reliable cost data to move ahead with that proposal
13 and in looking at any Make Allowance today. Absolutely.

14 Q. Wonderful.

15 DR. CRYAN: Thank you very much.

16 THE WITNESS: Thank you.

17 DR. CRYAN: Thanks for coming out.

18 THE WITNESS: Absolutely.

19 THE COURT: Mr. Rosenbaum, any follow-up cross
20 based on that examination?

21 RECROSS-EXAMINATION

22 BY MR. ROSENBAUM:

23 Q. Steve Rosenbaum for the International Dairy Foods
24 Association.

25 I wanted to follow up on a question and answer
26 from when Mr. Miltner was -- from Select Milk was asking
27 you questions.

28 And I -- I -- if you look at Hearing Exhibit 91,



1 which is your CDC Exhibit 6, this was the excerpt from
2 testimony at the May 10, 2000, hearing held by USDA to
3 consider possible changes to the Make Allowances, correct?

4 A. Oh, the 2000 hearing?

5 Q. Yes.

6 A. Yes.

7 Q. And I believe you testified in response to
8 Mr. Miltner that it was your understanding that mozzarella
9 was -- was I think you said simply ignored or words to
10 that effect.

11 Do you recall saying that?

12 A. That's based on this transcript that we're looking
13 at, yes.

14 Q. Okay. Now, do you know -- are you aware that the
15 testimony that was given at that time, as reflected in
16 here, in Exhibit 91, resulted in a decision -- tentative
17 decision by USDA issued in December of 2000?

18 A. Yes, on or about.

19 Q. Okay. Well, let me -- let me -- I'm going to read
20 you an excerpt from that and -- and -- which says as
21 follows, quote -- this is a page 76846 of volume 65 of the
22 Federal Register, which is the tentative USDA decision on
23 the proposed amendments.

24 Quote: "Several witnesses testified that types of
25 cheeses other than cheddar should be included in the NASS
26 price survey as a more comprehensive basis for identifying
27 cheese price, although such a proposal was not included in
28 the hearing notice. The cheddar cheese included in the



1 NASS survey meets certain standard criteria that makes
2 prices for the reported cheese sales comparable. If the
3 survey included other descriptions of cheddar and other
4 types of cheese, such as mozzarella, it would not be
5 possible to consider the reported price as representative
6 of the value of any particular product. Further, the
7 manufacturing costs surveyed are, to a great extent,
8 limited to the cost of processing cheddar cheese," end
9 quote.

10 Isn't it fair to say that it wasn't that
11 cheddar -- excuse me. Let me start that question again.

12 Isn't it fair to say that it wasn't that
13 mozzarella cheese was ignored but rather that USDA reached
14 a considered decision that it was inappropriate to include
15 mozzarella cheese?

16 A. I think what -- what this exchange aimed to talk
17 about was that the Class III at that time ignored
18 mozzarella as a category.

19 Since 2000, the mozzarella production has
20 increased significantly and has now surpassed that of
21 cheddar, so we think it plays a more important role even
22 than it did then. So, you know, we think -- again, the
23 data's limited, but we think it's important to get the
24 data so that we could have a standardized mozzarella that
25 could be included in the Class III.

26 MR. ROSENBAUM: No further questions.

27 THE COURT: Anything else before AMS steps up?

28 AMS, your witness.



1 CROSS-EXAMINATION

2 BY MS. TAYLOR:

3 Q. Good afternoon.

4 A. Good afternoon.

5 Q. I'm going to go through your statement, and I have
6 a few questions, and then kind of get to a few more
7 weedy-like questions.8 On page 2 you talk about -- the second full
9 paragraph at the end -- your monthly pricing survey that
10 you do of your members, and I know it was discussed that
11 that information is made available to your members. But
12 you do say it's evident the net price paid will total
13 approximately \$14 per hundredweight.14 I'm just wondering the time period of some of
15 these numbers, that \$14, specifically.16 A. Yes. So these are numbers that are coming in for
17 July, and if you look at the net that they're reporting,
18 it's in that range when you look at the deductions that
19 dairy producers are incurring.20 Q. Okay. On the next page, you wrote, "In the
21 absence of a dairy growth management plan, today we have a
22 patchwork across the country of plants that send strong
23 signals to dairy producers about how much milk to produce
24 and some that don't."25 And I was wondering if you could expand on what
26 you meant by "send strong signals."27 A. Yeah. What we found in working with our
28 membership is that certain plants have base plans that

1 their shippers need to follow and others that don't. So
2 some plants send signals to their dairy producers that
3 they need to about what production they will take on and
4 some don't.

5 Q. Okay. That's helpful. Thank you.

6 And then later on you get into -- you discuss the
7 GAO report that I know you included as an exhibit, and
8 then in this last sentence talk about, "Although CME sales
9 account for less than 1% of all cheese sales."

10 I was curious of the time period on that number.
11 Does that go with the 2007 GAO report?

12 A. I think that was in a more recent statistic that I
13 looked at, but I would be happy to provide that.

14 Q. And is that spot -- the spot cheese market is what
15 you are talking about?

16 A. Yeah.

17 Q. Okay. Later on you reference an HTF Market
18 report.

19 What is HTF?

20 A. Yes. It is a company that publishes market
21 reports. And that was a headline that -- that was out
22 just recently about growth of mozzarella -- the report is
23 actually out now.

24 Q. Okay. That's not one -- but I don't recall that
25 being one of your exhibits. Is it?

26 A. It's a very expensive report, so --

27 Q. That's fine. I just want to make sure I didn't
28 miss something.



1 A. Okay.

2 Q. And then under "Mozzarella Specifications," which
3 is about where the rest of my remaining questions are.

4 A. Uh-huh.

5 Q. But the first thing in that second paragraph, you
6 say, "Mozzarella production is the largest category of
7 cheese produced today and deserves a standard
8 specification."

9 I'm wondering if you could expand on that because
10 you discuss some about how USDA has some specifications
11 and FDA has specifications. So what do you mean in that
12 sentence?

13 A. Yeah. I mean, I think, you know, we -- again, our
14 dairy producer members see that category of mozzarella and
15 question, you know, what type of mozzarella is being
16 produced, what's the price -- the wholesale price that's
17 paid for that mozzarella. So I think, again, that's the
18 reason why we have brought our proposal forward is that we
19 want to make sure that that information is available so
20 that we can get at a standard for mozzarella.

21 Q. A standard being something different than, say,
22 the current FDA standard?

23 A. Well, just like a -- you know, similar to
24 determining what the moisture standard would be of -- of
25 mozzarella based on what's produced.

26 Q. Okay. So kinda going along the lines of asking
27 specifics on how mozzarella would be incorporated into the
28 formulas.



1 A. Uh-huh.

2 Q. So the purpose as -- you know, you discuss
3 yourself the Federal Order system is to compute minimum
4 handler prices and producer prices. And on the handler
5 side, we do that by surveying wholesale commodity
6 products, which currently that means cheddar cheese, and
7 we -- we don't survey what we consider value-added
8 products. So our cheese survey is bulk commodity
9 products.

10 A. Right.

11 Q. And assuming that methodology does not change,
12 what mozzarella products would you consider to be
13 wholesale or bulk that should be included as opposed to
14 value-added?

15 A. Yeah. I mean, I think the 5- to 6-pound loaves
16 that are included in our exhibit, you know, might -- would
17 be our suggestion given that that's, you know, the most
18 extensive data that we have.

19 Q. Okay. And FDA currently has a standard identity
20 for cheddar, which we use, and mozzarella also has an FDA
21 standard of identity that can be found in regulation.

22 Do you have any idea how much mozzarella -- what
23 people consider mozzarella production meets that standard
24 of identity?

25 A. Well, I think, you know, that's definitely a
26 question to USDA as it -- as it puts to -- totals that
27 category of mozzarella, what's being considered there.

28 Q. So would you like to see only milk meeting that



1 standard be surveyed, or you would -- as I'm taking some
2 of your other testimony, you would consider milk not
3 necessarily meeting that standard of identity -- or
4 mozzarella not necessarily meeting that standard to be
5 surveyed and included in the price formulas?

6 A. Yeah. In terms of what our membership has
7 supported, we would like a mozzarella standard that is
8 representative of what's being produced today.

9 Q. So that's broader than just FDA?

10 A. I would say yes.

11 Q. Okay. Currently, we use weighted average block
12 and barrel survey prices to determine our cheese price.

13 A. Uh-huh.

14 Q. How would CDC propose mozzarella be incorporated
15 into that calculation?

16 A. We would like to be -- have it included as part of
17 that weighted average so that you would look at that
18 mozzarella production, again, that's now greater than
19 cheddar, and weight it that way.

20 Q. Okay. It seems like a small difference, but would
21 it be the percent of mozzarella -- excuse me -- percent of
22 product surveyed or the percent of U.S. production, cheese
23 production? There could be two very different numbers.

24 So you would weight by whatever we surveyed,
25 whatever the mozzarella represented in that survey of
26 products, versus I know you have some NASS data in here on
27 mozzarella and what that production is, and that would be
28 a different number, and I would hazard to guess probably a



1 different percentage when you compared it to the cheddar
2 cheese production numbers they put out.

3 A. Yeah. I think we would be supportive of the NASS.

4 Q. So U.S. cheese production?

5 A. Yes.

6 Q. Okay.

7 THE COURT: Off the record.

8 (Off-the-record.)

9 THE COURT: On the record.

10 MS. TAYLOR: Thank you.

11 BY MS. TAYLOR:

12 Q. Your testimony says USDA should rely on the Van
13 Slyke cheese formula to determine a mozzarella yield.

14 I was wondering if you had any information -- I
15 know it's kind of technical, but we USDA people like to be
16 technical. You know, it has a lot of factors in there,
17 and I looked it up online to see what those were.

18 A. Uh-huh.

19 Q. Butterfat recovery and fat and protein factors, do
20 you have any information to put on the record of what you
21 think those factors should be or where USDA should turn to
22 look for those factors?

23 A. That's something we can provide if -- but at this
24 point, for today, we don't have that. We haven't brought
25 that.

26 Q. Okay. Do you have any idea how mozzarella is
27 currently priced in the market? Like, what -- what do
28 manufacturers of mozzarella use to price their cheese off



1 of?

2 A. Yeah. We have reached out to some cheese makers.
3 They haven't been that responsive on it, so we don't have
4 that information.

5 Q. So I think generally what I'm hearing is that for
6 those factors that USDA would need to incorporate
7 mozzarella into its current formula, you would advocate
8 that USDA go out and have the authority to collect that
9 information in which to incorporate those factors as it
10 deems appropriate?

11 A. Yes.

12 Q. Okay. One last question. I almost forgot.

13 CDC is a dairy farmer organization. Can you give
14 us an idea of how many would be considered small farmers?
15 And for context, the Small Business Administration defines
16 a small dairy farm as that making \$3.7 million or less in
17 annual revenue.

18 A. Revenue? I would say the significant majority of
19 ours would be small then.

20 Q. Okay. Thank you very much.

21 MS. TAYLOR: That's it, your Honor.

22 THE WITNESS: Thank you.

23 THE COURT: Anyone want to try to justify
24 re-cross?

25 Any in the nature of redirect? Is there anything
26 further you wanted to say, anything that occurs to you
27 that you left off in answers to cross-examination
28 questions, Ms. McBride?



1 THE WITNESS: No. I think I have had a chance to,
2 you know, say our entire testimony, and really appreciate
3 the opportunity to be here.

4 THE COURT: Very well.

5 In that case, I propose to admit Exhibits 86 and
6 87 through 95. I won't highlight them individually.

7 Does anybody have any objection to the admission
8 into evidence of those exhibits?

9 Mr. Rosenbaum, are you standing to talk or just
10 standing? Just standing. Okay.

11 With that, Exhibits 86 through 95 are admitted
12 into the record -- yes, Mr. Hill.

13 MR. HILL: I wasn't sure if we needed the physical
14 copy. I know that we don't --

15 THE COURT: Oh, that's right. We're going to get
16 physical copies tomorrow. Thank you.

17 As I understand it, we'll have physical copies
18 available tomorrow, and we'll postpone the actual
19 admission of those exhibits.

20 Although, I will be interested if someone's got an
21 objection tomorrow that they didn't have today, but very
22 well. Yes. Thank you, Counsel.

23 With that, I think it's a ten-minute break. Let's
24 come back at -- let's just come back at 3:00. Let's make
25 it 15.

26 (Whereupon, a break was taken.)

27 THE COURT: We have a new witness, Ms. Hancock?

28 MS. HANCOCK: We do, your Honor. We have Dr. Mike



1 Van Amburgh.

2 THE COURT: Okay. Raise your right hand.

3 MICHAEL VAN AMBURGH,

4 being first duly sworn, was examined and

5 testified as follows:

6 THE COURT: Your witness.

7 MS. HANCOCK: Thank you, your Honor.

8 DIRECT EXAMINATION

9 BY MS. HANCOCK:

10 Q. Mr. Van Amburgh, would you mind stating and
11 spelling your name for the record?

12 A. Sure. Michael Van Amburgh, M-I-C-H-A-E-L, capital
13 V-A-N, capital A-M-B-U-R-G-H.

14 Q. Thank you. And I should have called you Doctor.
15 You're a Ph.D.

16 A. Okay.

17 Q. Apologize for that.

18 And what is your mailing address?

19 A. My mailing address -- work or personal?

20 Q. Wherever you would want somebody from this hearing
21 to mail you something.

22 A. 272 --

23 THE COURT: Well, not your house. We don't want a
24 private residence.

25 THE WITNESS: 272 -- want to make sure we're
26 clear.

27 THE COURT: Yeah, we just don't -- we don't
28 want -- I'm trying to keep out -- just so everyone knows,



1 we're trying to keep out personal identifying --

2 THE WITNESS: 272 Frank Morrison Hall, Department
3 of Animal Science, Cornell University, Ithaca, New York,
4 14853.

5 BY MS. HANCOCK:

6 Q. Thank you.

7 And did you prepare some testimony for the hearing
8 here?

9 A. I did.

10 Q. And is that what we have identified as Exhibit
11 NMPF-3?

12 A. Yes.

13 Q. Okay.

14 MS. HANCOCK: And, your Honor, if we could have
15 that identified with an exhibit number.

16 THE COURT: Yes. NMPF-3 identified -- marked for
17 purposes of identification 96.

18 (Thereafter, Exhibit Number 96 was marked
19 for identification.)

20 MS. HANCOCK: Thank you.

21 BY MS. HANCOCK:

22 Q. And did you also prepare a PowerPoint presentation
23 that has been identified as Exhibit NMPF-3A?

24 A. Yes. 3A through 3T.

25 Q. Okay.

26 THE COURT: Shall we mark that as one -- just mark
27 that as one exhibit, right?

28 MS. HANCOCK: I think that's right, your Honor.



1 So for purposes of identification we'll mark that as
2 Exhibit 97.

3 THE COURT: So marked.

4 (Thereafter, Exhibit Number 97 was marked
5 for identification.)

6 MS. HANCOCK: Thank you.

7 BY MS. HANCOCK:

8 Q. Would you mind providing us with an overview of
9 your educational background?

10 A. Sure. I have a Bachelor's of Science from Ohio
11 State University and a Ph.D. from Cornell University.

12 Q. Okay. What's your Bachelor's degree in?

13 A. Dairy science.

14 Q. When did you obtain that degree?

15 A. 1984.

16 Q. And your Ph.D.?

17 A. 1995.

18 Q. What was your --

19 A. Animal science.

20 Q. Animal science.

21 And can you give us an overview of your
22 professional career?

23 A. Yes. I have been a professor at Cornell now for
24 28 years. I currently lead the Dairy Program. I think
25 relevant to -- the undergraduate Dairy Program, and
26 relevant to this discussion, I also lead the development
27 of a nutrition model called the Cornell Net Carbohydrate
28 and Protein System that's a licensed technology. It is



1 currently used to feed about 70% of the cows in North
2 America -- or formulate diets for about 70% of the cows in
3 North America.

4 Q. And other than academia, are you otherwise -- do
5 you hold any other employment or consulting roles?

6 A. No. I just advise a company.

7 Q. I'm sorry, just advise?

8 A. I'm a scientific advisor for a company.

9 Q. Okay. And prior to joining academia, did you --
10 were you employed in any private capacity?

11 A. I was a district sales manager for an AI
12 cooperative.

13 MS. HANCOCK: Your Honor, we would offer
14 Dr. Van Amburgh as an expert in animal science.

15 THE COURT: Yes. I find on voir dire the witness
16 is qualified to testify as to animal science.

17 MS. HANCOCK: Okay.

18 THE COURT: And what I can tell anything else in
19 this proffered testimony.

20 MS. HANCOCK: Thank you, your Honor.

21 BY MS. HANCOCK:

22 Q. Dr. Van Amburgh, would you mind providing your
23 statement and the presentation that you have before you?

24 A. Yes. I'm here to talk about milk and milk
25 components and where cows are going, what I think cows are
26 going to do or what they are capable of.

27 So with that, I'll read. I'm going to do this in
28 kind of a professorial way. I have slides, and I'm going



1 to integrate the slides with my talk. So if you want to
2 follow along, I'll call them out.

3 There are three over-arching factors impacting
4 milk and milk component yield in dairy cattle, and those
5 are genetics nutrition and the combined effects of
6 environment and management. NMPF-3-A and NMPF-3-B.

7 I will spend some time describing each one of
8 those factors and how they independently and
9 synergistically impact milk component yield, sometimes
10 independent of milk yield itself.

11 In other words, we have learned that when we get
12 nutrient supplies, we say more correct, we can -- we can
13 alter milk component yield in high-producing cows
14 independent of changing milk yield.

15 So historically, we used quantitative genetic
16 tools to identify animals within the population that were
17 producing milk or milk components in a manner that
18 characterized them as outliers. This phenotypic
19 observation was combined with parent information and data
20 from contemporaries to make assessments concerning the
21 genetic ability of cattle and possibly their ability to
22 translate that capability.

23 With this process, cows were identified, selected,
24 bred to highly selected and proven bulls to make an
25 offspring. If the offspring was a bull, then the
26 offspring bull would have to grow up, come of age for
27 semen collection, and then wait for daughters to calve in
28 and produce milk, as we needed to follow that cycle again.



1 A group of daughters would require productivity
2 measurements to determine if the offspring from the
3 planned mating carried the genetic capacity for increased
4 productivity. This led to generation intervals of at
5 least four to five years, so selection pressure for milk
6 and components was greatly reduced because of that timing.

7 Today, we have genomic selection, in vitro
8 fertilization, and embryo transfer that can reduce the
9 interval to less than four years for phenotypic
10 measurements and two years for genomic testing of
11 newborns. Thus, the rate of genetic change due to these
12 technologies is accelerating the capabilities of dairy
13 animals for increased productivity, including milk
14 component yield.

15 And genomic selection provides rapid information
16 on the calf's genetic capacity immediately after birth, so
17 the selection process can start very quickly once the calf
18 has been identified. And certain genes have been
19 identified, like DGAT-1 (diglyceride acyltransferase),
20 which is involved in the formation of triglycerides from
21 glycerol and fatty acids.

22 Not that everybody needs the biochemistry, but
23 it's important to know that because we know that gene
24 exists and we know where it is, that that's allowed for
25 increased genetic selection pressure, and you can see some
26 of that discussion on 3-C.

27 In attachments 3-D and 3-E, the milk fat and
28 protein percents for Federal Milk Market Order 1 and 30



1 are plotted. In those graphs we can see that over ten
2 years, the milk fat percentage increased approximately 0.2
3 units, or about 5.3%. This is true for both Federal Milk
4 Marketing Orders.

5 The seasonal effect on fat and protein percentage
6 is apparent in both graphs. What is also apparent is the
7 difference between changes in the milk fat and milk
8 protein over the same time. Both fat and protein have
9 been highly selected in the last ten to 13 years.
10 However, we have learned it is easier to observe and feed
11 for increased milk fat percentage and yield in dairy
12 cattle than it is for protein, which is why the percentage
13 of protein has not moved nearly as fast as the fat in
14 those two marketing orders.

15 The data on attachment 3-F from Dr. Paul VanRaden
16 at Beltsville is useful. Above the diagonal are the
17 genetic correlations between milk components and milk, and
18 below the diagonal are the phenotypic correlations.

19 And you can see it's really interesting to me that
20 the genetic correlations are obviously quite high; the
21 phenotypic correlations are even higher. And I think that
22 is important, that fat is correlated with milk 0.4 where
23 phenotypically it is 0.62, suggesting that nutrition and
24 an environment can play a significant role in milk fat.
25 And the same holds true for protein, although the
26 correlations are high for both genetic and phenotypic
27 expression.

28 But I think this data are useful because it helps



1 us understand that we can breed for more genetics, but
2 their environment and nutrition are going to play a role
3 as to how those genetics are expressed. And I think we
4 have to keep that in mind.

5 I think what's also relevant to this hearing and
6 the forward-thinking about what has to happen with some of
7 these adjustments is what's seen in the graph in
8 attachment 3-G. And quite frankly, this was a surprise to
9 me when I looked at it, because as somebody who's charged
10 with trying to figure out the requirements of a cow, this
11 makes me realize that we probably aren't doing our job as
12 well as we thought we could.

13 And why I say that is if you look at the graph, it
14 shows the change in sire breeding value for fat, we're
15 looking at fat here, from 1957 to 2021. And the sire
16 breeding value represents the relative change per year in
17 milk fat yield. And you can see from the data that using
18 this range in time, it took 57 years to increase milk fat
19 yield by 300 pounds using non-genomic selection, back to
20 the quantitative genetics, whereas since 2013 with genomic
21 selection, the change has been 154 pounds in nine years.
22 And at the current rate of change, a 300-pound change will
23 be achieved in 15 to 18 years, which is about six times
24 faster.

25 All right. So this is pretty important from my
26 perspective as a biologist because this tells me that
27 knowing which nutrients to feed that cow to meet that
28 genetic potential is going to continue to change, and the



1 amount's going to change. Right. We have this great
2 capacity now for these cattle.

3 On attachment 3-H a similar observation could be
4 made for the sire breeding value of protein, and again,
5 the rate of change is almost five times more rapid using
6 genomic selection, which means a near exponential rate of
7 change with genomic selection and shorter generation
8 intervals for most sires in the industry.

9 What this data points to overall is that with more
10 modern genetic selection tools like genomics, IVF, and ET,
11 the rate of change is going to be highly positive and the
12 capacity for milk component yield by Holstein and Jersey
13 cattle will be quite high.

14 This next statement gets me in trouble sometimes,
15 but there is no reason to believe that Holstein cattle
16 cannot routinely be at 5% butterfat and 3.5% protein in
17 the near future and that now most cattle -- most Holstein
18 cattle can easily achieve butterfat percentages of 4.2 to
19 4.6% with protein between 3.1 and 3.4. Jersey cattle have
20 similar capacity for change; however, the component yield
21 will lag the Holsteins simply due to milk volume.

22 The graph on attachment 3-I shows a nearly
23 100-year description of butterfat levels in the U.S. and
24 the rate of change since genomic selection took over in
25 the industry. This slide is important as it represents
26 all breeds. As milk yield increased, the percentage
27 dropped, especially from 1950 to 1970. After 1970, milk
28 fat was stable but lower through to about 2012 to 2013,



1 again the onset of genomics.

2 Then from 2015 on, there has been a 0.25 unit
3 increase in butterfat. The drop from approximately 4% in
4 1950 took about 20 years; however, the increase back to
5 those pre-1950 levels took only about five years, right,
6 demonstrating the power of genomic selection and some
7 changes in how we feed cows.

8 There is a dietary formulation relationship here,
9 and I can come back to that if somebody wants to ask.

10 Which does lead to the role of nutrition in milk
11 fat. And it is important and something that was
12 overlooked for many years until the role of particular
13 fatty acids in milk fat synthesis and depression were
14 identified. This is still an emerging area of work, but
15 we now have a good idea of which fatty acids to avoid
16 feeding to not cause what we call milk fat depression.

17 And for many years we overfed unsaturated fatty
18 acids -- fatty acids which have one or two double bonds --
19 and those fats are toxic to rumen bacteria, so the
20 bacteria -- and so there are bacteria in the rumen which
21 will saturate and hydrogenate those fats.

22 Some of the intermediate fats will negatively --
23 the ones that don't get saturated will impact the
24 production of de novo fat, which reduces milk fat in a
25 condition we call milk fat depression. Once this
26 phenomenon was fully understood by practicing
27 nutritionists, they began to reduce the feeding of these
28 unsaturated fats, which then allowed for an increase in



1 milk fat synthesis by the cow and an increase in butterfat
2 levels.

3 Some of the data on attachment 3-I reflects this
4 situation from 1970 to about 2010 when there is a
5 noticeable increase in butterfat due to the shift in
6 diets. Then in 2016, you can see the combined effect of
7 diet and genomic selection for milk fat in the increase in
8 milk fat percentage.

9 The information on attachment 3-J is background
10 information about how milk fat is formed. I'm not going
11 to go through that, but if somebody wants to know the
12 biochemistry, we can come back to it. How's that?

13 On attachment 3-K there is a graph depicting the
14 effects of feeding particular fatty acids on milk yield,
15 milk fat yield and milk protein yield. It is important to
16 recognize that we have learned how to use particular fatty
17 acids to improve all three outcomes, and generally it is
18 cost effective to do so on a daily basis.

19 You can see in the figure that in the case of fat
20 supplementation, milk fat -- milk yield increases, and for
21 the most part, milk fat yield increases when feeding most
22 of these dietary fats.

23 Of interest is the last plot where milk protein
24 yield is shown to marginally improve when feeding these
25 dietary fats. At first this seems counterintuitive that
26 feeding a fat would affect milk protein; however, what
27 we've learned is that it's part of the regulatory factor
28 where fats will stimulate insulin increases in these cows.



1 Insulin will then in turn signal the mammary gland to
2 increase protein synthesis, and one of these outcomes will
3 be more milk protein yield.

4 All right. So what we're learning is that we can
5 feed certain fatty acids and stimulate a milk protein
6 response independent of a milk fat response. And it's
7 quite intriguing as we get more precise about some of this
8 information.

9 An overview of the process is found in attachment
10 3-L, right, where one of the primary promoters of milk
11 protein synthesis is energy, and the energy stimulates
12 insulin secretion, which in turn promotes milk protein
13 synthesis. So again, it's a coordinated event, typical of
14 most functions in metabolism. Again, the details can be
15 discussed if anyone is interested, but it's important that
16 we recognize that energy and insulin are important drivers
17 of milk protein.

18 And on attachment 3-M, there are studies showing
19 where we simply infuse some glucose and some insulin and
20 saw increases in milk protein up to 15% without any
21 additional dietary inputs. Right? And then we did add
22 some amino acids, and we saw increases up to 28% of milk
23 protein synthesis. And again, that was simply due to
24 stimulation through insulin, again, an energy source, not
25 a protein source.

26 All right. So the idea is that there is lots of
27 ways to impact milk components, and as we get more
28 sophisticated in our understanding of this, it means we



1 actually have more capacity to do that.

2 Okay. The data on attachment 3-N discusses
3 factors related to diet formulation and milk component
4 yield. In addition to understanding the mechanisms
5 involved in milk fat and protein production, with the
6 increases in genetic capacity, the nutrient requirements
7 for amino acids, fatty acids, and particular carbohydrates
8 are slowly changing, and as an industry, we are likely not
9 meeting all of them due to a lack of knowledge or, a more
10 practical thing, the cost of the ingredients.

11 Okay. When we do a better job of formulating and
12 feeding a diet that meets the requirements for these high
13 genetic capacity cattle, we observe significant increases
14 in milk fat and protein percentage and yield. In many
15 cases, these increases in milk fat and protein in Holstein
16 cattle allows them to yield components similar to
17 historical Jersey cow milk composition, which is higher.

18 The table and information on 3-0 shows some
19 historical data on the differences in composition between
20 Holstein and Jersey cattle. This was published in 1998
21 for reference. It is apparent that there is a significant
22 difference between the breeds of cattle in fat and protein
23 percent.

24 As described earlier, to improve milk fat, we want
25 the cow to produce or make more de novo and mixed fatty
26 acids, which are the fatty acids four to six carbons long.
27 In some research studies, we have been able to increase
28 milk fat by up to 10%, meaning going from 4.2 to 4.7, and



1 milk protein by 8%, going from 3.1 to 3.35, while
2 maintaining milk yield. Thus, there is significant
3 capability to use nutrition to improve milk component
4 yield, and we are not yet making best use of that in the
5 industry, again, due to a lack of information and the
6 perceived cost of the dietary ingredients versus the
7 benefits.

8 The graphs on 3-P from Dr. David Barbano show
9 where Holstein cattle de novo and mixed fatty acids were
10 in 2019 versus what we observed in one of our recent
11 studies.

12 If you look at the left side of the graph, you
13 will see the regression line with the blue dots, and then
14 you are going to see that red line extended out beyond
15 that. So that red line extended beyond the blue dots was
16 our study.

17 And while we were conducting that study,
18 Dr. Barbano called me and said, "Are you sure you are not
19 feeding Jerseys?"

20 I said, "No, they are actually Holsteins."

21 He said, "I don't believe you."

22 I said, "They are really Holsteins, Dave."

23 He goes, "I don't have any Holstein data that
24 looks like that."

25 I said, "Well, we're getting better at figuring
26 out how to feed the Holsteins." Right?

27 And for a comparison -- which means, you know, my
28 joke is if I can turn Holsteins into Jerseys, I should be



1 able to turn Jerseys into water buffalo. Right? If
2 anybody knows anything about water buffalo, they've got
3 10% fat, so we'll see where we can go with those Jerseys.

4 Anyhow, if we look at the right side of that graph
5 on 3P, you can see where the Holsteins were ranking
6 relative to the Jerseys. They were in the top 50% of the
7 Jersey cattle in terms of their de novo and mixed fatty
8 acids.

9 All right. So this is -- to me, this is very
10 telling because this tells us that we have a lot of
11 capacity with our cattle once we truly understand their
12 requirements. It's going to take a lot of re-education to
13 get nutritionists and dairy producers to understand that
14 this -- this new higher genetic capacity for milk
15 components is going to require diets that look a little
16 non-traditional. Right?

17 So anyhow, the data clearly shows that the
18 potential for nutrition to impact milk components, and the
19 current industry hold-up is being able to demonstrate to
20 dairy producers and nutritionists that diet composition,
21 especially amino acid balancing, can have a profound
22 impact on milk component yield.

23 To demonstrate that this is not only possible in
24 research data, there's data from two herds from Southern
25 Pennsylvania that are on the attachment 3-0. Again, the
26 important aspects of this are that with the updated
27 formulation guidelines, the nutritionists were able to
28 maintain milk yield and increase the milk fat by 0.4 to



1 0.5 units, which was a 9 to 12% increase, and increase
2 milk protein by 0.3 to 0.4 units.

3 So, again, there's Holsteins producing 90 pounds
4 of milk making Jersey components. And this was done
5 through improved formulation using our nutrition model.

6 Again, this reinforces the capability of our
7 current dairy cows to produce more components without
8 increasing their dry matter intake, by simply doing a
9 better job of meeting their nutritional needs with more
10 refined requirement information and better knowledge about
11 how some ingredients can be used to enhance components.

12 Finally, the environmental effect is important to
13 consider. As a consequence of selection for milk yield --
14 and I don't mean environment as in -- as in the
15 environmental impact of dairy production, more about some
16 things we have to consider relative to their housing and
17 who these animals area.

18 As a consequence of selection for milk yield, cows
19 continue to get larger, which means over time facilities
20 need to be updated to accommodate these cows. The data on
21 attachment 3-R and S shows the change in mature size of
22 cows at the Cornell University Research Facility from 1993
23 to 2016. You can see that mature body weight increased
24 300 pounds, which is a sizeable weight.

25 So if you think about it, in terms of where we are
26 updating facilities and where we're not, you know, I can
27 tell you that Wisconsin has done a great job improving
28 their facilities and reinvesting in barns. New York in



1 the Northeast, not so much. Right?

2 So where dairy barns have been updated and cow
3 comfort increased to accommodate the cows, along with a
4 myriad of other factors, like bunk space, water space, and
5 cooling, we can see greater productivity responses.

6 Thus, cow comfort, lying time, and related factors
7 can be a limiting factor for productivity, and although
8 not a driver of milk components like genetics and
9 nutrition, can be a limiting factor for herds that don't
10 have the capacity to update.

11 In summary, cows have a tremendous capacity for
12 milk component yields. It is likely that many Holstein
13 cows in the industry are capable of 5% butterfat and over
14 3.5 true protein while maintaining yield. And Jersey
15 cattle have paralleled capacity. I just don't have the
16 data for the Jersey cows.

17 The use of genomics and other reproductive
18 technologies is enhancing that capacity faster than
19 nutritionists can learn to meet the updated requirements.
20 We are not currently feeding the cows to meet their
21 capability for components.

22 Finally, housing, comfort -- cow comfort, lying
23 time, and other time budget related functions will only
24 enhance the expression of their potential.

25 That ends my testimony.

26 THE COURT: Ms. Hancock, direct?

27 MS. HANCOCK: Your Honor, we'd submit him for
28 cross at this point.



1 THE COURT: Who has cross for this witness,
2 besides AMS?

3 Mr. English.

4 CROSS-EXAMINATION

5 BY MR. ENGLISH:

6 Q. My name is Chip English, representing the Milk
7 Innovation Group.

8 I had the privilege of starting with the Chicago
9 Mercantile Exchange this morning on a subject that I knew
10 little about. And I am not a scientist, so I'm -- and
11 this is after lunch, so I really only have a couple of
12 questions.

13 First, what is the AI Cooperative?

14 A. Artificial Insemination Cooperative.

15 Q. Not artificial intelligence, let's be clear.

16 A. No. No. No.

17 Q. Would it be fair to say this is the first time you
18 have testified at a Federal Milk Marketing Order?

19 A. Yes.

20 Q. Would it be fair to say that before you prepared
21 for this hearing -- I mean, I don't know, how much have
22 you studied Federal Orders over the years?

23 A. Not to the degree that you have.

24 Q. Yeah, well. And I don't have a science degree,
25 again.

26 Just a couple of questions. On the bottom of
27 page 1, you reference the capabilities of dairy animals
28 for increased productivity, including milk component



1 yield?

2 Increased productivity would also mean more
3 milk --

4 A. Yeah.

5 Q. -- for --

6 A. For most people that includes more milk.

7 Q. Yes. Okay.

8 A. Which is also true.

9 Q. Yes.

10 Looking -- well, let me go first to page 3 of your
11 PowerPoint, which is Exhibit 97, or 3-C.

12 A. Yep.

13 Q. And the bottom separated bullet point: "Milk
14 protein is more complex and tightly tied to lactose
15 synthesis and energy sensing by the cow so more difficult
16 to move."

17 What does that statement mean?

18 A. Yeah. So if you look at -- if you look at -- one
19 of the things that I'm trying to get across there is that
20 the liver recognizes nutrient supply, and in response to
21 the nutrient supply will produce things like IGF-1 or will
22 redirect nutrients in coordination with the brain and some
23 other organs to ensure that certain functions are taken
24 care of.

25 So, for example, IGF-1 is one of the major
26 promoters of milk synthesis. It is sensitive to energy,
27 so the first promoter region is sensing energy, something
28 like propionate and glucose, but there's a second promoter



1 region in the liver that's sensitive to amino acids.

2 Right?

3 Which what I mean by that is, is that when you
4 have a cow in good positive energy balance and she's
5 eating a good diet and she's making a lot of propionate
6 and converting glucose, the liver will sense that and will
7 produce more IGF-1, which will stimulate more productivity
8 from the mammary gland and redirect nutrients to the
9 mammary gland.

10 On top of that, if you were to supply the
11 appropriate amino acids that would better meet the
12 requirements for milk protein or milk fat synthesis, the
13 liver will also recognize that, send out more IGF-1 to
14 accommodate the recognition that there's more nutrients
15 there to produce more product. Highly complex.

16 Q. All right. So what I'm struggling with is what
17 role does lactose play in this sense, tied to lactose
18 synthesis? I'm -- I'm -- Doctor, I really -- I really --

19 A. Right. No, no, no, no.

20 Q. -- avoided all the science classes in college.

21 A. So milk protein, if you look at -- if you look at
22 the biochemistry of milk protein synthesis and lactose
23 synthesis, they tend to go more in parallel. And if you
24 were to look at -- and you guys that study the milk market
25 see this, milk fat is highly variable, but milk protein
26 and milk lactose are highly correlated and more tightly in
27 relationship. And that's just simply how the cow produces
28 those two. I don't want to get into those pathways.



1 Q. All right. So would that mean -- does that mean
2 what you are saying is, when the cow produces more
3 protein, it produces more lactose in the milk?

4 A. No. No.

5 Q. That's not part of --

6 A. They have historically been tied together, and we
7 thought that's how it worked, and it still does. But what
8 we're learning is, as I was trying to point out in some of
9 these later pieces of evidence, that we have now figured
10 out how to supply some of these nutrients in a way where
11 lactose is only going to respond based on the amount of
12 glucose that's being supplied to the cows since glucose is
13 going to be converted to lactose. But that when we do a
14 better job of understanding the amino acid requirements
15 per unit of energy intake, that she will respond with more
16 milk protein or milk fat output while holding that lactose
17 constant.

18 Q. Okay. So the lactose doesn't go down, but it's
19 not going up.

20 A. It is not going up.

21 Q. Nonetheless, if we look at page 15 of Exhibit 97,
22 NMPF-3-0, the percent of lactose that's in milk remains
23 higher, say, than protein, correct?

24 A. Yep. 4-point -- depends if you want to do it
25 anhydrous or not. But, yes. It is not the percentage, it
26 is the amount.

27 Q. So, please, it's not --

28 A. So the lactose is the -- lactose is the major



1 osmoregulator of milk yield, so it's never really going to
2 change in percentage, and if it does, you are probably not
3 measuring it right. Right? So you are not going to
4 change the percentage, which you -- the more you produce,
5 the more milk volume you have.

6 So the percent is somewhat irrelevant. It's that
7 how many pounds or how many grams of lactose are you
8 producing, and that's going to be directly related to the
9 amount of milk production you are going to see. Whereas
10 what we have learned is we can uncouple that relationship
11 with our better understanding of amino acids requirements
12 and fatty acid requirements and hold that lactose yield
13 constant while getting the cow to be more efficient by
14 putting out more components.

15 Q. Nonetheless, it is still held constant, correct?

16 A. Lactose is always going to be about 4.78.

17 MR. ENGLISH: Thank you, sir.

18 THE WITNESS: Sure.

19 THE COURT: Additional cross, other than AMS?

20 AMS, your witness.

21 CROSS-EXAMINATION

22 BY MS. TAYLOR:

23 Q. Good afternoon.

24 A. Hi.

25 Q. I'm kind of like Mr. English and stayed away from
26 science classes. So I do appreciate the lesson. And
27 generally, I think I followed along on what you were
28 saying.



1 I did have a question. I think there's been a
2 line of questioning, and I'm -- I don't think you were
3 here last week, but in discussion of components and the
4 desire for handlers to get increased components in the
5 milk. And so I can clearly understand why farmers are
6 trying to increase the components in their milk production
7 and then get paid on those.

8 But do you have any information on -- from the
9 processors or the manufacturer side and their desire to
10 get increased components in the milk that they purchase,
11 or is that not kind of your specialty?

12 You have to say no for the record.

13 A. Yeah. So -- so the only -- so the answer -- the
14 real answer is no. That's not where I spend my time.
15 Right? My time is spent trying to figure out how to make
16 a cow more efficient --

17 Q. Okay.

18 A. -- per unit of intake.

19 The only comment I have ever received from a
20 cheese producer, mostly a cheddar producer, was that if
21 you can't figure out how to get the protein to increase as
22 much as the fat, I might have to skim my milk. But that's
23 the -- that's as -- that's as far as my processor
24 knowledge.

25 Q. Okay. And do you think there's some kind of,
26 like, top line level that eventually will be reached?

27 A. No. I don't -- not at the rate of change that I
28 see right now.



1 Q. Okay. I think we had one just technical thing for
2 the record. On page 3 of 4, at the bottom, you reference
3 NMPF 3-0, and then I believe that should be -Q. So I just
4 wanted to -- you talked -- and this is the page that's on
5 the research from two herds in Southern Pennsylvania, and
6 I think that's page Q, and I just wanted to make sure the
7 record was clear.

8 A. Probably.

9 Q. It is the first sentence of the --

10 A. Yes, I see it. Yes, it should be Q. I agree.

11 Q. It is the first sentence of the very last
12 paragraph in --

13 A. Yep.

14 Q. -- on page --

15 A. That should be Q.

16 Q. Okay.

17 A. It is referring to those Pennsylvania herds.

18 MS. TAYLOR: That's it. Thank you so much.

19 THE WITNESS: Thank you.

20 THE COURT: Redirect?

21 MS. HANCOCK: Your Honor, I have nothing further.

22 I would offer Exhibits 96 and 97 into evidence.

23 THE COURT: Any objections?

24 Exhibits 96 and 97 are admitted into the record of
25 this hearing.

26 (Thereafter, Exhibit Numbers 96 and 97 were
27 marked and received into evidence.)

28 THE COURT: Thank you, Doctor.



1 MS. HANCOCK: Thank you.

2 THE WITNESS: Thank you.

3 THE COURT: You may stand down.

4 Next witness.

5 MR. ROSENBAUM: Steve Rosenbaum for the
6 International Dairy Foods Association. We call Mr. Mike
7 Brown.

8 THE COURT: Please raise your right hand.

9 MIKE BROWN,

10 Being first duly sworn, was examined and
11 testified as follows:

12 THE COURT: Your witness.

13 DIRECT EXAMINATION

14 BY MR. ROSENBAUM:

15 Q. Could you please state your name for the record?

16 A. Michael Brown.

17 Q. And, Mr. Brown, where are you currently employed?

18 A. International Dairy Foods Association.

19 Q. And what is your title there?

20 A. Chief economist.

21 Q. And how long have you held that position?

22 A. Since January of this year.

23 Q. And could you please take us back in time to cover
24 the various positions you have held in the dairy industry
25 during your career?

26 A. I'd be happy to.

27 I went from working for a cooperative extension in
28 1987, I went to work for National Milk Producers for four



1 years --

2 (Court Reporter clarification.)

3 THE WITNESS: I worked for National Milk Producers
4 Federation for four years as an economist. After that, I
5 worked for a private consulting firm, before going to
6 National All-Jersey, where I worked for ten years, working
7 mostly with cheese plants, on yields, yield assumptions,
8 calculating their yields from their components in their
9 plant, and also, advocating for expansion of multiple
10 component pricing in Federal Orders, including the Federal
11 Order Reform which I was very involved with.

12 After that, I went to work for Dairy Gold as a
13 director of member services where I worked with producers,
14 as well as -- as milk buyers, selling them raw milk. And
15 also -- also, working with risk management programs, other
16 producer incentive programs along the way and managing
17 their field staff.

18 In 2007, I went to work for Glanbia -- who was at
19 that time Glanbia Foods, now it's Glanbia Nutritionals --
20 based in Twin Falls, Idaho, and I was director of
21 economics and policy. A lot of my time there was spent,
22 again, with plants and yields, determining value of
23 components within plants to develop a payment program for
24 producers to make updates.

25 I also dealt with regulatory things like Federal
26 Orders, and then also did a lot of work with risk
27 management and creative risk management solutions for both
28 Glanbia's producers, as well as some of their end product



1 cheese customers. And then that's the one place where I
2 did some work on international trade as well. And, boy,
3 that's an interesting place to be.

4 Left there in 2015 to work for Kroger. I got
5 hired as director of dairy supply chain, where I managed
6 the team that purchased all the dairy products for
7 Kroger's 15 milk and ice cream plants, as well as their
8 two cheese packaging plants. Again, did policy work
9 there, risk management work there, and -- and basically
10 made sure the plants had their products and made sure the
11 Kroger brand products in the stores met needs and were
12 competitively cost. We also managed those purchases.

13 So I've kind of went from the cow to the consumer
14 in my career.

15 Q. All right, sir. And in these positions, did you
16 have experience in analyzing the impact of public policy
17 on dairy plant and dairy industry economics?

18 A. Every single one, yes.

19 Q. And have you been called upon to testify at other
20 Federal Order hearings on those issues?

21 A. Yes, I have.

22 Q. Okay. And how many occasions?

23 A. 2000, 2006, '7, and this one. And the -- all the
24 ones dealing with yields and pricing. But also was very,
25 very involved in the informal rulemaking portion of
26 Federal Order Reform in the late '90s. Worked and
27 actually developed the original set of formulas that were
28 used to price -- price milk. In fact, they were completed



1 in a Super 8 in Wisconsin before a Jersey dispersal.

2 Q. A little louder.

3 A. Okay. I -- I actually wrote the first set working
4 with university folks. And then my understanding of
5 cheese yields, we wrote the first set of Federal Order
6 component formulas and worked with USDA to fine tune
7 those, and they were adopted as far as Federal -- part of
8 Federal Order Reform. So very actively involved.

9 Q. And by "Federal Order Reform," are you referencing
10 the new set of regulations that came into effect in 2000?

11 A. That is correct.

12 Q. And focusing on multiple component pricing, tell
13 us a little more about what your experience has been on
14 that subject.

15 A. Well, a lot of my career has been spent -- at
16 National Jersey, give you a little background where I
17 spent ten years of my career, is an organization that
18 advocates for pricing milk and components, but not just
19 regulatory-wise, but working with plants to build
20 incentive programs to get the kind of milk that maximizes
21 the margins in their plants. In fact, that was the --
22 that was the original work of All-Jersey, along with
23 marketing All-Jersey milk. Used to be a big milk
24 marketing program.

25 So there, and then every place I have been, when
26 you are trying to figure out what the regulated price is
27 of your milk and of your components versus what its value
28 is in your plant, helping people -- helping my employers



1 understand the true value of components as they move
2 through a dairy plant, so they know whether they are
3 paying the right price for them.

4 Q. And farm costs and economics, where have you been
5 involved in that?

6 A. Well, before I worked at National Milk, I was a
7 farm extension agent in Upstate New York. So worked --
8 worked with farm costs there.

9 And then throughout my career, I worked on farm
10 costs. Did an analysis early on with rBST in
11 profitability. That was when I was at National Milk
12 Producers Federation. And particularly with Dairy Gold
13 and with Glanbia, worked with producers -- and also
14 All-Jersey, on farm budgets, on risk management
15 opportunities. And, again, a big part of a successful
16 risk management program is dairymen need to understand
17 their costs, so we would work with them on that.

18 And then I did a lot of regional comparisons of
19 productions costs, at Glanbia in particular, as we're
20 looking where -- where milk was most efficiently produced.
21 So I would collect -- collect cost data from basically
22 across the country, and we'd try to equate it in a format
23 and make comparisons. That was -- I did that every year.
24 That was a regular part of my job.

25 MR. ROSENBAUM: Your Honor, at this point I would
26 like to have Mr. Brown recognized as an expert in multiple
27 component pricing, dairy product yields and values, farm
28 costs and economics, risk management, and the impact of



1 public policy on dairy plant and dairy industry economics.

2 THE COURT: Any objections?

3 I find this witness qualified to speak -- to
4 testify as an expert to those topics.

5 MR. ROSENBAUM: At this point I would like to have
6 marked the two exhibits that -- that Mr. Brown has. One
7 is designated as IDFA Exhibit 4, whatever the next number
8 is, your Honor.

9 THE COURT: The next number is 98 by my notes.

10 (Thereafter, Exhibit Number 98 was marked for
11 identification.)

12 MR. ROSENBAUM: And the other is IDFA Exhibit 5,
13 which I guess we'd ask to be marked as Hearing Exhibit 99.

14 THE COURT: So marked for identification.

15 (Thereafter, Exhibit Number 99 was marked for
16 identification.)

17 BY MR. ROSENBAUM:

18 Q. Now, Mr. Brown, is Hearing Exhibit 98 your actual
19 written testimony?

20 A. It is.

21 Q. And given its length, thankfully, you are choosing
22 not to read the entire thing into the record; is that
23 right?

24 A. Especially this late in the afternoon. I think I
25 would be booted out of the room. So that's -- yeah, so
26 we're going to do a summary.

27 Q. Okay. Is Hearing Exhibit 99, which you have put
28 up on the screen and which we have handed copies out, is



1 that a PowerPoint that goes through the most fundamental
2 issues that you address in your written testimony?

3 A. Yes, it does. And -- and what it does, it allows
4 us to basically cover what would be more than an hour to
5 read in a summation format, but it covers all the same
6 issue.

7 Q. And to the extent that there are numbers, figures
8 of various kind in Hearing Exhibit 99, the PowerPoint
9 presentation, is there more detailed information regarding
10 the calculation and derivation of those numbers in Hearing
11 Exhibit 98, your written testimony?

12 A. There is. And there's also four appendix items
13 that refer to some -- of how the calculations were
14 completed and refer to the data that was used to calculate
15 it.

16 Q. All right. We're now looking at page 2 of your
17 PowerPoint presentation.

18 And does this basically simply attempt to
19 summarize Proposals 1 and 2?

20 A. Yes, it does.

21 Q. Okay. And those -- and those proposals would
22 simply increase the skim milk component factors based
23 upon -- by changing the assumptions in the Class III and
24 IV formulas for nonfat solids, protein, and other solids;
25 is that correct?

26 A. That is correct.

27 Q. Okay. And then if we go to the next page, which
28 is page 3, is this simply a description of your



1 understanding of the information upon which the proponents
2 of Proposal 1 and 2 obtained information relating to the
3 levels of those components?

4 A. Yes. And we heard in testimony, I actually went
5 back and calculated weighted averages, and it does include
6 all of the data. Both the estimates as well as the actual
7 data.

8 Q. So that we're looking at -- at -- now we're going
9 to -- go back one -- yes, thank you. Thank you.

10 So we have various information regarding the
11 concurrent component levels in skim milk in the Federal
12 Order system, correct?

13 A. That is correct.

14 Q. All right. And so let's go to the next page, and
15 basically I think you're intending here just to orient the
16 discussion. The first thing you are going to talk about
17 is what impact, if any, Proposals 1 and 2 would have on
18 Class II, III, and IV pricing in the seven multiple
19 component pricing orders, correct?

20 A. That is correct.

21 Q. And just to orient ourselves, once again,
22 Proposal 1 and 2 in all cases would seek to increase the
23 current assumptions regarding protein, nonfat solids, and
24 other solids in farmer milk?

25 A. In skim milk, that is correct.

26 Q. Skim milk. Thank you for that clarification.

27 All right. So let's go on then to the next slide
28 and tell us what -- what you're saying here and what the



1 basis is.

2 A. Well, this refers several times in -- in the
3 testimony so far, milk -- multiple component pricing
4 order milk values encompass 89% of the total order milk
5 marketing in 2022. And I think because it's already
6 priced on components, Proposals 1 and 2 would have no
7 impact whatsoever on Class III and IV handler obligations
8 or producer receipts for Class III and IV milk in the
9 seven MPC orders.

10 Q. And that -- I'm sorry, and just to clarify, that's
11 because in those orders handler obligations and producer
12 receipts are based upon actual component levels, not upon
13 assumed component levels; is that correct?

14 A. It's based on actual pounds of components as
15 measured.

16 Q. And have you also determined that there is a
17 slight impact on Class II from the proposal?

18 A. Yes, we did, and it was a bit of a surprise. I
19 went back and looked at the proposed language. Basically,
20 because you raise the factor in Class II, which uses the
21 nonfat solids factor of 9.41 in the proposal versus 9, it
22 of course raises that base level of -- of Class II skim.
23 But then you add the \$0.70 to it to give you that total
24 value.

25 Well, when you divide it back out, because in
26 Class II you determine the nonfat solids value from the
27 total Class II skim price divided by that reference
28 solids, so it's 9.41. It varies because you are dividing



1 in one case \$0.70 by 9; in the other place you are
2 dividing it \$0.70 by 9.41, so it gives you a slightly
3 different -- slightly lower number. It is not big, but it
4 is lower.

5 Q. Okay.

6 A. That's how we interpreted the -- the language.

7 Q. I take it that impact is not itself a major matter
8 of concern either way?

9 A. No. No. It -- it doesn't really make a whole lot
10 of difference.

11 Q. So if we go on to the next slide, slide six, I
12 think maybe you have covered this already, but just
13 summarize, you know, your views as to the effect of
14 Proposals 1 and 2 on Class II, III, and IV in the multiple
15 component pricing orders.

16 A. Well, no -- no effect on III and IV and very
17 negligible on II. But what they really do is that
18 manufacturers of those products are paying prices for
19 components that are either relating to the yield
20 components in that class from the Class II products that
21 may be used to make those products in Class II. So they
22 are very much valued based on the value to the processors,
23 what the products he can make, and, of course, producers
24 are rewarded that back on -- based on the Class III
25 components in the current seven Federal Orders that have
26 component pricing.

27 The other thing would be there is no determination
28 in I and II on any -- on determining handler obligations



1 of producer receipts with respect to Class II, III, and
2 IV. They essentially almost the same.

3 And again, the pricing levels, why component
4 pricing works well, is that pricing levels automatically
5 adjust as component levels change. So if a milk supply is
6 higher or lower in component and you are making a product
7 and manufacturing that's made out of those components, you
8 pay according to what the expected yield would be.

9 Q. So fundamentally, is IDFA satisfied with how
10 payments are handled for Classes II, III, and IV in the
11 multiple component pricing orders?

12 A. Yes. And our membership is very supportive of the
13 component pricing on those orders.

14 Q. And Proposals 1 and 2 don't propose to change that
15 in any meaningful way, up or down?

16 A. No. Really not in a significant way.

17 Q. Okay.

18 A. We don't see any negative impact at all.

19 Q. And once again, 89% of the milk in Federal Orders,
20 they're in those seven multiple component pricing orders,
21 correct?

22 A. That is correct.

23 Q. All right. So --

24 A. 89%.

25 Q. So let's move on, then, to the next topic, which
26 is the effective Proposals 1 and 2 on Class II, III, and
27 IV in the four fat/skim orders.

28 Now -- and go to the next page and tell us what



1 the impact of Proposals 1 and 2 would be on those four
2 orders.

3 A. Well, we're going to follow this with the chart.
4 But Proposals 1 and 2 would have direct effects on the
5 price paid for Class II, III, and IV in the four fat/skim
6 orders. That is, of course, because the multiplier
7 factors have changed from 3.1, 5.99 to 3.39, 6.02, and
8 9.41, so they are higher, so the skim values are higher.

9 The increase per hundredweight ranges from 40 to
10 \$0.80 per pound depending on the class. III is the
11 highest; II and IV are both at 40. And then we estimate
12 that the total impact based on 2022 utilization of milk
13 and -- and whey based on farmer payments based on the four
14 classes, were about \$33 million total using farmers'
15 solids utilized in the classes to calculate that number.

16 Q. Okay. Before you go on, so does that -- is that
17 reflect an annual increase?

18 A. Yes.

19 Q. And is that an annual increase in how much
20 processors would have to pay for the milk that they obtain
21 in those four orders for use in Classes II, III, and IV?

22 A. This would be -- this is the minimum regulated
23 price that they would be expected to pay, yes.

24 Q. And that would go up by about \$33 million,
25 correct?

26 A. Yes.

27 Q. Okay. And if you turn to the next slide, please.
28 Tell us what you are showing there.



1 A. Okay. A couple slides. The first one off to
2 the -- kind of off to the left, again, I think you have
3 all seen this or something very similar to it before. It
4 is what the skim adjustments would be for Classes II, III,
5 and IV. I did recalculate them myself using USDA
6 exhibits, and they are notated in the -- in the full
7 testimony.

8 You can see that five-year average, \$0.40 for II
9 and IV, 80 on III. Slight increase in SNF for Class II
10 because of that divisor of the \$0.70.

11 The one off to the left -- the right, excuse me,
12 is the impacts, where there are impacts, on Classes II,
13 III, and IV. Of course, in the multiple component orders,
14 Class II skim doesn't make a difference because they don't
15 pay on skim. There's a slight decline in SNF due to
16 the -- again, that divisor changing. Again, no change in
17 III and IV. They are already at component placing.

18 And in the orders of multiple component pricing,
19 again, based on utilization, you can see skim increases by
20 about 9 million; Class III, about 15.8; Class IV, about
21 8.2, which adds up to the \$33 million impact on regulated
22 minimum price.

23 Q. And -- and this would be a result of Proposal 1's
24 proposal to increase the assumed component levels in the
25 milk going into Classes II, III, and IV in the four
26 fat/skim orders; is that correct?

27 A. Yes, that's right. It assumes those levels on all
28 milk.



1 Q. Okay. And --

2 A. And the skim factor.

3 Q. And is that -- that's basically -- is that
4 fundamentally the question, whether that's an appropriate
5 assumption?

6 A. That -- yes. It's a huge question.

7 Q. All right. And so why don't we go on to the next
8 page, which is slide ten.

9 A. And that is the increase is completely unrelated.
10 Now, there is certainly a relationship, kind of like the
11 talk we just had on lactose. But it's -- it's going to
12 vary significantly from those assumed levels. They may be
13 higher; they may be lower. But we don't expect them to --
14 to -- you can't assume the four fat/skim orders have the
15 same levels, and we'll talk about that. Part of it's
16 heat, part of it's about incentives to make components and
17 best pricing, but there's reason to believe that they
18 would be different, and we found some evidence that that
19 is the case.

20 Q. Okay. Did you discover actual evidence regarding
21 the -- some or all of the component levels in -- in -- in
22 the areas -- geographic areas covered by the four fat/skim
23 orders?

24 A. Yes, we did.

25 Q. Okay. Why don't you go on to the next page and
26 tell us about that.

27 A. The best data we found was from DHIA. That's been
28 mentioned several times. I think a lot of you are aware



1 of the HIA. How do they improve the associations that --
2 basically, they manage cow records. They evaluate -- they
3 go to farms, collect weight, collect samples for
4 components. And then they compile those in records. All
5 the talk about genetics we just had is based on DHI data.
6 In fact, even the genomics benchmarking, when we're doing
7 gene marking, DHA is the reference data that people use to
8 do that.

9 That was managed by USDA up until maybe 15 years
10 ago or so, and now it's run by the Council on Dairy Cattle
11 Breeding.

12 (Court Reporter clarification.)

13 THE WITNESS: 20 -- and we looked at -- we looked
14 at all that data by state. We compiled that based on most
15 the utilization of milk in the state within a Federal
16 Order. And based on those -- on that information, we --
17 the recorded lactations, the total milk, represented about
18 62% of the total Federal Order value. So it's a very
19 large database, a very large piece of data.

20 BY MR. ROSENBAUM:

21 Q. Okay. So let's go to the next page, page 12, and
22 tell us what your examination of the DHI data revealed by
23 comparing what Proposals 1 and 2 would assume as to the
24 levels of nonfat solids versus what the DHI data suggested
25 would be the actual levels.

26 A. Again, we evaluated all four Federal Orders
27 differently, and the levels do vary. DHIA reports true
28 protein in fat and milk, just like the proposal. We took



1 the true protein in milk, divided it by the pounds of skim
2 in the milk based on the fat test for that market to come
3 up with a true protein in skim. And they are certainly
4 higher than 3%, but they are also -- or 3.1, but they also
5 vary a lot. Florida is the lowest; Arizona is the
6 highest. Arizona has more manufacturing, so that's maybe
7 not a surprise, even though it is a skim order. And the
8 weighted average is 3.25, so about .14 below the -- the
9 MCP average and the weighted national average.

10 Q. Well, just so we're clear. The Proposal 1 would
11 assume and would, in fact, impose payment obligations
12 based upon that assumption of protein percentage in skim
13 milk in the four fat/skim orders of 3.39%, correct?

14 A. That is correct.

15 Q. Now, do any of the four fat/skim orders, in fact,
16 have that protein --

17 A. No.

18 Q. -- level?

19 A. No. They are all -- they are all below.

20 Q. And -- and the current formula assumes 3.1%
21 protein?

22 A. That is correct.

23 Q. And so Florida, for example, is only a smidge
24 above the current formula and materially below the 3.39%,
25 correct?

26 A. That is true.

27 Q. And if you look at all four orders, skim/fat
28 orders combined, their weighted average is 3.25, correct?



1 A. That is true.

2 Q. Which is only roughly halfway between the current
3 assumption and what Proposal 1 would attempt to assume,
4 correct?

5 A. We would say a point and a half below the 3.39,
6 roughly, yes.

7 Q. Okay. And then when it comes to total nonfat
8 solids, the proposal would assume, and would require your
9 members to pay on their acquiring milk for Class II, III,
10 and IV in the four fat/skim orders, that total nonfat
11 solids were 9.41%, correct?

12 A. That is correct.

13 Q. And you have stated here that, in fact, based upon
14 the DHI data, the predicted nonfat solids is 9.25%,
15 correct?

16 A. That's true. And let me elaborate on that a
17 little bit, because I did a regression on all months of
18 milk component data back to 2000 that USDA had, and did
19 not only correlations, but did linear regressions. And
20 linear regression in Excel makes us all look smarter than
21 we are, but they are pretty amazing what's related and
22 what's not. And the highest relationship by far is
23 between protein and SNF. Again --

24 Q. Spell out what SNF means.

25 A. Oh, yeah. Sure. SNF, solids nonfat, nonfat
26 solids.

27 Q. Just so we're clear, solids nonfat --

28 A. Is the same --



1 Q. -- is the same thing as --

2 A. -- as nonfat solids.

3 Q. -- nonfat solids?

4 A. I've got to change my -- I have been using SNF for
5 too long.

6 So nonfat solids, again, the R squared is over
7 96%, and that predictor is very, very high. The reason it
8 is very high is because other solids variance is very
9 small compared to the other components of milk. It's
10 pretty well fixed.

11 Dr. Van Amburgh talked about how it's involved
12 with osmotic balance in the cow, and that is the case.
13 That's why it doesn't vary a whole lot. So when you do
14 that based on the component levels we had, it predicts
15 nonfat solids of 9.25, which is really consistent with
16 what you would expect with a 3.25 protein average. So it
17 is -- it is below the 9.41.

18 Q. Okay. Now, let's go to the next slide and talk
19 about whether this was -- these results were surprising to
20 you or not.

21 A. They weren't. I've worked in enough markets and
22 with Kroger bought milk in enough markets to -- to know
23 that there certainly are differences. And -- and there's
24 really a couple reasons.

25 One of the biggest ones is market signals, and
26 that is MCP orders directly pay farmers for higher nonfat
27 solids levels, so you would expect that those farmers
28 would feed and genetics and breed and manage for higher



1 components, because they get a direct economic incentive.

2 Fat/skim orders certainly pay for fat, and fat's
3 become more valuable as a share of the milk price. We
4 heard that from our farmer witness on Friday. But that's
5 what they pay for. They don't -- they don't pay for
6 others. So there's less incentive for a dairy producer in
7 those four orders to make protein, unless there's a
8 private program that made for some milk be offered at
9 something outside of the regulated minimum price.

10 Q. Okay. Let's go to the next slide. And you have
11 talked about how, in general, the actual nonfat solids
12 levels are lower in the fat/skim orders than in the MCP
13 orders and why that happened.

14 In -- in the proposal, would the assumptions as to
15 nonfat solids levels be uniform throughout the year?

16 A. No, they are not. They never are. There is
17 seasonality.

18 Q. No, no. I'm talking about in the formulas. Would
19 the --

20 A. Oh, the formula is absolutely the same. Yeah. It
21 is pounds times the value, yes.

22 Q. Okay. And so would that mean that, essentially,
23 if Proposals 1 and 2 were -- or 2 were adopted, there
24 would be an assumption as to protein, nonfat solid, other
25 solid levels, which would apply year round, correct?

26 A. That is correct.

27 Q. And is that how it works in the MCP orders, or no?

28 A. It is not. And yield is very significantly, I can



1 tell you that from personal experience as well. It's one
2 of the reasons before we had regulated protein pricing, we
3 had a lot of plants that Jersey worked with putting in
4 incentive programs, which would -- again, you would have a
5 base, and they would move as the year -- up and down
6 through the year.

7 Q. And so in the MCP orders, does the payment
8 obligation go up and down as --

9 A. Absolutely.

10 Q. Let me finish.

11 -- as the actual nonfat solids levels go up and
12 down?

13 A. Yes, they do. Whether it's protein or nonfat or
14 other solids, they do.

15 Q. Every -- every month, they go up and down?

16 A. Yes.

17 Q. All right. And tell us why that matters since
18 that is not how things would work if Proposals 1 or 2 were
19 adopted.

20 A. Well, it's kind of the fallacy of an average. I
21 mean, average? If your components average the national
22 average, on average that is what it's going to cost you,
23 assuming you produce the same amount of milk every month.

24 (Court Reporter clarification.)

25 THE WITNESS: But, basically, yields do vary
26 significantly. If you take the Federal Order component --
27 product yield formulas, and just simply look at yield, not
28 at component value, what you find, that on -- in the case



1 of cheese, the yield varies by .8 -- .8 pounds from low
2 month to high month as far as cheese -- cheese yield in
3 that meld. Interestingly, fat and whey cream doesn't vary
4 a whole lot, but the yield does. And then, roughly -- a
5 little smaller for -- not a lot of change in whey; you
6 know, the solids don't vary a lot. Nonfat dry milk, I
7 think it is .28 pounds.

8 So if you're in a cheese market, and say the
9 market is \$2, use a simple example, the value of that milk
10 is going to vary by the value of the cheese that's made
11 minus the manufacturing allowance. So in this case, in
12 the \$2 market, it would be -- it would be \$1.80 for the
13 cheese and .8 pounds -- I mean it would be -- \$1.80,
14 .8 pounds of \$1.80 is \$1.44.

15 So it can be very, very significant the difference
16 between months.

17 BY MR. ROSENBAUM:

18 Q. Okay. And -- and is that a defect in the proposed
19 assumption of a steady, unchange -- unchanging level of
20 nonfat solids?

21 A. I think it is because your yields do vary. And
22 it's one thing to say you will make it up six months from
23 now, but when you've got to pay the banker and pay your
24 producers in a certain month, it can have a significant
25 impact. \$1.44 is a lot of money.

26 Q. Okay.

27 A. And so it can. And, again, it doesn't send -- to
28 the buyer of milk or to the seller of milk, it doesn't



1 fairly value milk what it is really worth. It doesn't
2 reflect that change in components like component orders
3 do.

4 Q. All right. Let's go to the next slide, please,
5 which is 15. Can you just briefly tell us what that is?

6 A. Yeah. This is my cooperative extension eye chart.
7 There's lots of data on this chart. And this is reprinted
8 both in the slides and also in the written testimony.

9 Basically what this looks at are the yields,
10 again, based on all Federal Orders of components. I used
11 the ones that had actual numbers, although the annual
12 averages, as we know, work out about the same.

13 When you look at this, what you will see -- and
14 these are simple averages, they are not weighted -- but
15 what you'll see when you get over to the product yields
16 off to the right, the last four columns, is the predicted
17 yields from those products, the formulas are at the
18 bottom. They'll look familiar to anybody who's worked
19 with Federal Order formulas. It shows those variations in
20 yields.

21 For example, on -- on cheese yield, based on those
22 averages, you would be between 10.82 and -- and 10.07, and
23 you would have a .75 difference in range -- excuse me, not
24 .8. Whey is not a lot. We said whey -- other solids test
25 doesn't vary a whole lot. SNF, .26 in -- and that's a
26 fat -- and whey is, again, the same. So the variation is
27 really in nonfat dry milk, which is, of course, how we
28 price nonfat solids in cheese yield, which is a function



1 of protein value, although there's added value of -- the
2 value of fats included in that -- in that number.

3 Q. So is -- are these the numbers that back up the
4 previous slide?

5 A. Yes.

6 Q. Okay. So if you go to the next page 16, what's --
7 what's your conclusion regarding whether it's appropriate
8 to change the assumptions regarding nonfat solid levels
9 for the four fat/skim orders?

10 A. Well, based on what we were able to uncover on
11 finding a large dataset that covered milk within those
12 four orders, and based on what we know on the seasonality,
13 that it would often require people to overpay for milk
14 used in the four fat/skim orders, and particularly in
15 those months where the tests are even lower. So it would
16 cause an overpayment.

17 If those -- if those markets want to be paid on
18 components, they should adopt MPC. If the plants would
19 like to be paid -- would like to buy their milk on
20 components, they can also -- they can also ask for
21 multiple component pricing. And it would put them on the
22 same foot on per unit cost of components in their
23 manufacturing plants as in the other seven MCP orders.

24 Q. Okay.

25 A. Basically make them all equal.

26 Q. All right. We have been talking so far about the
27 impact of the proposals on Class II, III, and IV: First
28 in the MCP orders where there was no impact, and second on



1 the four fat/skim orders where you have just got through
2 describing the impact.

3 Let's move on now to the next slide, which is
4 slide 17, and talk about the impact of Proposals 1 and 2
5 on Class I skim in all Federal Orders. And go to the --
6 if you could go to the next slide.

7 A. Yeah. It would -- I think as has been
8 demonstrated in earlier testimony, Proposals 1 and 2 would
9 increase Class I prices in all 11 Federal Orders based
10 upon increased levels of skim milk solids used to
11 calculate the skim values, but in the case of Class I, no
12 corresponding impact on product yield.

13 Q. Okay. So let's just -- just delve into what that
14 means a bit.

15 If -- if you are making a Class II, III, or IV
16 product, so that would be cheese, nonfat dry milk, ice
17 cream, do higher skim milk solids have a benefit to you as
18 a processor?

19 A. They do. In fact, anything you make in II, III,
20 and IV, with the exception of maybe cream, you know, like
21 half and half, you are basically taking moisture out,
22 whether it is butter, whether it is -- whether it is
23 powder, whether it is cheese. And so the component itself
24 determines the yield, not the value. That's what makes
25 manufacturing values so different because it -- it is --
26 yield is based on those fat and skim components in the
27 milk.

28 Q. Okay.



1 A. And Class I, there is no -- it's not even legal to
2 adjust it. So you are -- if you have a hundred pounds of
3 skim, you are going to get the same number of gallons of
4 milk as you would if you had -- no matter what the test
5 levels are. Because of standards of identity, you can't
6 adjust them.

7 Q. Okay. And that's what you mean -- when you say no
8 corresponding impact in product yield, you are talking
9 about here no -- no impact on how many gallons of milk you
10 have to slip in a jug and sell, right?

11 A. That is correct.

12 Q. Okay. So turn to slide 19, please, and tell us
13 what these -- you've got sort of two tables side by side.

14 A. Yes.

15 Q. Tell us what these are all about.

16 A. Again, the first table is the proposed adjustments
17 in those values. Again, you have \$0.80 five-year average
18 on III, \$0.40 Advance Class IV. So with the current
19 formula with 50/50 plus the adjuster, it would be a \$0.60
20 increase in -- in that Class I base price for skim milk.

21 Q. All right. Just to orient ourselves, probably
22 everyone understands it. But Class I -- the Class I price
23 is currently based upon -- well, why don't you finish
24 that.

25 A. Yeah. It's -- it's USDA calculates formula prices
26 basically twice a month but for different purposes. The
27 first one, which is the advanced price announcement,
28 prices Class I fat and skim and also applies to solids



1 nonfat, nonfat solids. And those -- those -- they are the
2 same formulas, same -- same calculations as used at the
3 end of the month as far as determining what they are. But
4 they are -- in the case of Class I, there's skim only. So
5 you take that Class I -- Class IV nonfat solids value,
6 that Class III protein, and other solids values, use those
7 factors that we have talked about many times, come up with
8 the skim value.

9 And with the factors proposed by National Milk,
10 the first chart here shows the difference between the new
11 calculations being proposed and the current calculation
12 per hundredweight of skim milk. So that's the change in
13 skim milk price with the different proposals.

14 Q. Okay. And so what is the actual change resulting
15 from Proposals 1 and 2 if they were to go into effect?

16 A. The actual change on Class I would be -- the
17 current Class I formula is -- skim is a simple average
18 plus \$0.74. The change would be the simple average
19 between the change in III and IV, which gives you \$0.60.

20 Q. So the long -- the long and short of it is, if
21 Proposals 1 and 2, or 2, went into effect, the minimum
22 Class I price would go up by \$0.60 a hundredweight in all
23 11 Federal Orders, both the MCP orders and the fat/skim
24 orders, on average, correct?

25 A. That is correct. Yes.

26 Q. All right. And so tell us what -- what the chart
27 on the right-hand side shows.

28 A. Again, we calculated total impacts for orders, and



1 that was based on USDA's data. Again, the references are
2 in the big -- in the larger testimony.

3 Based on milk used by class, total -- total
4 class -- total use by class, in this case it's all skim
5 because this is a skim price proposal, and we looked at
6 what the difference would be based on multiplying that --
7 that -- that change, that \$0.60 change, times the
8 utilization of the skim. And it comes up to -- in the MCP
9 orders, about 181 and a half million dollars, about 58.9
10 in the fat/skim. So right at 240 for all orders combined.

11 Q. Let's just stop right there to make sure we're
12 clear.

13 So if Proposals 1 and 2, 1 or 2, came into effect,
14 then Class I handlers would, from a minimum regulated
15 price perspective, have to pay an additional \$240 million
16 for milk going to Class I; is that right?

17 A. That is correct.

18 Q. Is that an annual figure?

19 A. Yes.

20 Q. Okay.

21 A. Based on 2022 USDA Federal Order --

22 Q. Okay. And then column two, I take it that's a
23 repetition of the testimony you did earlier as to the
24 impact on Class II, III, and IV in the skim/fat orders?

25 A. Yes. As well as that small adjustment in the MCP
26 orders on Class II. So that's -- that's the -- again,
27 those are the same numbers, the totals from the other
28 chart.



1 Q. Okay. Now -- and then the total impact, if you
2 add the effect of the proposals on Class I in all 11
3 orders plus the effect of Proposal 1 and 2 on Class II,
4 III, and IV, mainly felt in the fat/skim order, a slight
5 impact on Class II, that's the \$33 million, correct?

6 A. Correct.

7 Q. Total impact, \$271 million a year?

8 A. Yes.

9 Q. Okay. Now -- and just to orient ourselves once
10 again, all of this is based upon assumed increases in
11 nonfat solids in farmer milk, correct?

12 A. It -- yeah. It is based on those national
13 averages.

14 Q. Okay. And so now let's turn to the, if you will,
15 \$64,000 question as to Class I milk.

16 In your view, is it legitimate to ask Class I
17 handlers to pay an extra \$240 million for the milk going
18 to bottled milk because nonfat solids levels have gone up?

19 A. Well, if you take -- if you're a purist on yields
20 like I am, and you know that protein and fat affect cheese
21 yield, you know nonfat solids affects nonfat dry milk
22 yield, you know other solids affects whey yield. You also
23 know in the case of fluid milk because we cannot legally
24 standardize down, that it is the pounds of skim that
25 determine your yield; it is not the components contained
26 within the skim.

27 Q. Okay. And do you feel that what you just said is
28 something that USDA's previously recognized?



1 A. They actually have in -- in -- several times, in
2 fact, going back to the first -- first order on
3 component --

4 Q. All right. So let's turn to page 21, and this is,
5 I guess, getting to the heart of the opposition, to the
6 proposals.

7 So can you just read into the record what USDA had
8 to say when it first adopted component pricing in the
9 Great Basin and Lake Mead Marketing Areas in 1988.

10 A. Yes, I can.

11 "While protein content was seen to be critical in
12 establishing the value of milk used in cheese, there was
13 no evidence that protein content has any effect on the
14 value of fluid milk products at all.

15 "On the contrary, there appears to be a general
16 agreement that consumers are not willing to pay more for
17 fluid milk with a higher-than-average protein content than
18 they are for low-protein milk. Handlers cannot easily
19 remove protein from fluid milk products to add to products
20 in which it would have value, and it is illegal for them
21 to add water to milk to reduce its protein content.

22 "Therefore, handlers obtain no discernible
23 difference in economic benefit from the various levels of
24 protein contained in milk used in fluid milk products, and
25 there is no justification for requiring them to pay for
26 such milk according to its protein content."

27 Q. And is that consistent with IDFA's views?

28 A. Yes.



1 Q. All right. So let's turn to the next page, 22.
2 And do you -- do you -- what's your view as to whether
3 what USDA said in 1988 is still true today?

4 A. Oh, it is still true. US- -- FDA standards of
5 identity still forbid Class I handlers from removing and
6 selling excess skim milk solids and nor can they dilute
7 milk. It is extremely -- they are rigid. There's a
8 minimum, but you cannot -- you can't adjust to meet the
9 minimum.

10 And except for specialty products, and there's a
11 couple that represent only a small share of fluid milk
12 sales, consumers do not perceive value in the skim milk
13 solids in excess of FDA standards of identity
14 requirements. Again, you have some -- and there's a
15 little more conversation on that in our longer testimony.
16 Products like we all know are Fairlife. There's a couple
17 of store brand higher protein products. They are a very,
18 very small part of the sales. And they are big
19 significant increases of protein components versus what
20 we're talking about with skim milk here.

21 Q. Now, you worked for Kroger for a number of years,
22 correct?

23 A. Yes, I --

24 Q. Kroger -- Kroger is one of the biggest, maybe even
25 top three, I guess, grocery store chains in the United
26 States?

27 A. Well, if you don't call Walmart a grocery store,
28 they are the largest. And they remind us of that a lot.



1 Q. Then it is the largest.

2 And do you -- I mean, do you -- did that work you
3 did for Kroger give you some personal insight into the
4 statement you made as to statement number two --

5 A. It really -- it really did. When you -- when you
6 market fluid milk, typically, you know, regular
7 pasteurized gallons, half gallons, called HTST,
8 high-temperature short-time pasteurization, when you look
9 at that milk and what consumers look for, they look for
10 three things: They look for price; they look for sell-by
11 date, how much freshness is left on that milk; and they
12 look to see for the same product, whether prices within
13 that store of maybe a national brand or a competing store
14 down the street. It is very much a commodity market. It
15 is very much price driven.

16 Q. Okay. All right. Now, let's go to the next
17 slide, 23. There have been in testimony by the proponents
18 in favor of 1 and 2 certain arguments they have advanced,
19 and I'd like to hear your views about those.

20 One is the notion that there has been a narrowing
21 of the pricing between Class I and the other milk classes
22 given that the price paid for high component milk in the
23 MCP orders has gone up as the levels of nonfat solids in
24 those orders has gone up. What's your view about that?

25 A. That again gets back to yield value of the milk,
26 that the class -- that the component pricing is about,
27 determining end product values for milk. And in Class I,
28 the end product value for skim simply doesn't change



1 because your yield doesn't change, so you need to take --
2 you need to take in, in effect, a couple of things.

3 First of all, if you are making cheese or you are
4 making nonfat dry milk, particularly cheese, you can get
5 significant added value out of those components. You
6 don't get added value out of water in cheese, there's
7 plenty of water in milk for cheese, it's the components
8 that are in that milk.

9 Nonfat milk, again, you are drying it to 97% dry
10 matter, so the same thing. You are taking out water. It
11 is that nonfat solids that has value. Same is true with
12 whey.

13 Fluid milk, we don't have that ability. So the
14 yield, a hundred pounds of skim milk is going to yield the
15 same amount of gallons under the concurrent conversion
16 factors for skim as it would under the new one, so there
17 is no added value to a processor.

18 And that's not necessarily a bad thing. That's
19 just the reality of yield and where the milk value is.
20 And it's just -- I would argue it is very consistent
21 between all -- all uses of milk, like USDA talked about
22 back in 1988.

23 Q. Okay. And -- and do you regard the fact that the
24 pay obligation for Class III -- II, III and IV goes up as
25 the -- as the nonfat solids levels goes up, but not the
26 value for class milk -- Class I milk? Is that alignment
27 or misalignment?

28 A. I think it's alignment. It is basically



1 yield-based pricing. You get the same -- you don't get
2 more half gallons because the components went up. Skim is
3 still skim.

4 Q. Is that -- from your point of view, is that -- is
5 that -- is the relationship that has evolved as solids
6 have gone up, is that a good thing or a bad thing?

7 A. Again, I think it's an honest reflection of the
8 value of the milk.

9 Q. Okay.

10 A. I think it is actually a good thing.

11 Q. All right. So let's go on to the next slide, 24.
12 And I just want to be very clear about this. Is IDFA
13 suggesting that the price of Class I milk should be
14 decoupled from the price of Class III and IV milk?

15 A. No -- no, we're not. Actually we still believe
16 III and IV as a base for the value of Class I skim works.
17 And in fact, "to the contrary" -- and I'll read here --
18 "when demand for Class III and IV products or other
19 factors increase the price in which those products are
20 sold, regulated minimum Class III and IV prices
21 automatically increase."

22 As those product values goes up, that milk value
23 goes up.

24 "These increases are automatically reflected in
25 higher Class I minimum prices" -- they already are -- via
26 the base milk prices for Class I skim and milk and
27 butterfat.

28 This is a fundamental basis upon which the Federal



1 Order system operates. But the Federal Order system does
2 not and should not increase Class I prices when the
3 increase in Class II, III, and IV payment obligations
4 instead reflect higher nonfat component levels that are of
5 value to Class II, III, and IV, but not Class I products.

6 Q. And then if we turn to the last page of your
7 PowerPoint presentation, page 25, there has also been some
8 discussion by the proponents of a purported need to
9 increase Class I prices in order to attract an adequate
10 supply of milk for Class I purposes.

11 What is -- what is your view on that subject?

12 A. Well, when I was buying milk for 15 clients at
13 Kroger, everywhere from California to Georgia to Ohio,
14 Indiana, Utah, Oregon, never had an issue with milk
15 supply. There was always milk available. And you do pay
16 premiums to get that milk to your plant, and that's part
17 of the negotiation that's expected. And they changed over
18 time. In fact, they increased the last few years.

19 So -- but getting milk was never an issue. In
20 fact, we even had suppliers who would work together to
21 improve efficiency of transportation getting milk into a
22 particular plant, just because it saved transportation
23 costs. So we never found that to be a problem.

24 And there's several things that, you know,
25 indicate that. First of all, essentially all milk is now
26 Grade A. I mean, I always say the only milk that's
27 Grade B is if somebody failed a bulk tank unit with FDA.
28 Until they get their rating back, you will be B. So it's



1 essentially all milk.

2 And so the supply of milk versus what we had, even
3 20, 30 years ago is much higher, this eligible percentage
4 of the supply. And --

5 Q. Just to interrupt there. That's because milk for
6 drinking purpose, it has to be Grade A milk, correct?

7 A. Yes, it does.

8 Q. And there was a time in this country where, I
9 don't know what it was, most milk maybe even was Grade B
10 milk?

11 A. Oh, yeah -- well, back when orders started, it was
12 less than half.

13 Q. Okay. And -- and today it is essentially all
14 Grade A milk?

15 A. Essentially all milk.

16 Q. So all of it is available -- eligible, I should
17 say, not available -- all of it is eligible for
18 Class I purposes --

19 A. It meets the FDA standard to be bottled as Class I
20 as fluid milk.

21 Q. Keep going, please.

22 A. 27% of marketing is the lowest it has ever been.

23 Q. It's -- what do you mean?

24 A. The utilization of milk in -- of the total Federal
25 Order pool in Class I.

26 I think another thing you may want to mention
27 here, I want to mention, is keep in mind that not all milk
28 is actually marketed through Federal Orders. There's a



1 few state orders. They are small. But there's also a lot
2 of unregulated milk. I mean, you look at the total supply
3 of U.S. milk, again, which is essentially all Grade A,
4 that number is around 20% is Class I.

5 Q. 20% is what? What is that number?

6 A. Of the total milk in the Federal Order supply, 20%
7 is Class I.

8 Q. So only 20% of the milk produced in this country
9 actually goes into fluid consumption?

10 A. That is correct.

11 Q. Okay. Keep going, please.

12 A. Okay. And so there's plenty of milk to meet
13 demand. Again, that's my personal experience. And
14 there's some other -- some other empirical evidence I
15 think that shows that.

16 And what are the shipping requirements? Going
17 back to 2010, which is part of -- one of the exhibits from
18 USDA, which was very helpful, no one has been asked to
19 increase shipping requirements to require manufacturers to
20 provide more milk into Class I. In other words, shipping
21 requirements, there was a lot milk that goes to Class I
22 markets has never been increased.

23 However, to the contrary, the orders have
24 routinely lowered these shipping requirements at the
25 behest of the very cooperatives that are now claiming in
26 this hearing that orders should be changed to reflect an
27 alleged -- we think it is alleged -- non-existent supply
28 definition -- deficit for Class I milk.



1 Milk has always been available. We -- I think
2 most processors pay premiums to get that milk outside of
3 the order pricing, which goes directly to the supplier who
4 is trying to provide you that market. We think that is a
5 fair way to do it. But there is certainly not a lack of
6 milk for Class I.

7 Q. All right. Does this complete your summary of
8 your testimony?

9 A. Yes, it does.

10 MR. ROSENBAUM: Okay. Your Honor, there are two
11 corrections that Mr. Brown made to his PowerPoint
12 presentation after it was circulated, so they don't appear
13 in the written version. So I would like to tell everybody
14 what they were so they can make a cross-out correction,
15 but my intention is to send USDA a corrected exhibit,
16 Hearing Exhibit 99.

17 But I just want to let y'all know, on page 8 --

18 THE COURT: Yeah, I think that works, and then
19 that will -- we'll substitute the corrected exhibits for
20 the posted online exhibits and for the official version
21 that we're keeping.

22 MR. ROSENBAUM: We will bring a substitute copy to
23 everybody for tomorrow morning so they don't have to have
24 two copies.

25 But just so you know, on page 8, if you want to
26 turn to that, I'll tell you what the correction was. It
27 says "total impact on the four MCP orders." You should
28 mark out "MCP" and write in "fat/skim." That was just an



1 error.

2 And then on page 10, in the second line, there's a
3 word "from," and the word "from" should just be stricken.
4 That was just a typo.

5 As I say, we'll circulate -- we'll file tonight a
6 corrected version, and we'll bring copies tomorrow.

7 Anything else, Mr. Brown, you want to --

8 THE WITNESS: Not at this time. Thank you.

9 MR. ROSENBAUM: All right.

10 Your Honor, at this point -- well, I'm not sure
11 for the time, if he should be tendered for
12 cross-examination now or available tomorrow morning.

13 THE COURT: We'll find out. Thank you, Counsel.
14 Off the record.

15 (Off-the-record.)

16 THE COURT: Mr. Brown remains on the stand.

17 Mr. Vetne is going to take advantage of 15 minutes
18 or so we have left today, so you can cross-examine. Thank
19 you, Mr. Vetne.

20 MR. VETNE: Thank you, your Honor.

21 CROSS-EXAMINATION

22 BY MR. VETNE:

23 Q. John Vetne, V-E-T-N-E, representing National
24 All-Jersey.

25 Dr. Brown, thank you for being here.

26 I want to start with your PowerPoint page 12, and
27 refer you back to your testimony, Exhibit 98, page 23 of
28 44.



1 PowerPoint page 12 represents a summary of the
2 Dairy Herd Improvement information on component levels in
3 various parts of the country, correct?

4 A. Correct.

5 Q. Page 12 in the PowerPoint specifically refers to
6 the areas represented by the fat/skim orders --

7 A. Yes.

8 Q. -- correct?

9 Is that correct?

10 A. Yes, that's correct.

11 Q. You have to respond out loud.

12 A. I'm sorry. I thought I did.

13 Q. Now I'm looking at page 23 of 44 of your prepared
14 testimony that was marked but not read, thank you,
15 Exhibit 98. And I note that -- that Arizona for 2022, is
16 that Order 131?

17 A. Yes.

18 Q. Okay. In Table 3 of your testimony, shows milk
19 protein content for Order 131 of 3.37%, and on page 12 of
20 your PowerPoint, it says 3.34%.

21 Can you explain the difference?

22 A. Yes. The table on page 12 was mislabeled. It
23 should be 2019 to '22 average protein, three-year average,
24 which was the numbers on the last line of the table on
25 page 23.

26 (Court Reporter clarification.)

27 THE WITNESS: On page 23 of the written testimony,
28 the last line of the chart, Table 3, has those -- those



1 numbers for the three years, which is what these are.

2 BY MR. VETNE:

3 Q. Oh, okay. So page 12 of the PowerPoint does not,
4 in fact, represent the year 2022?

5 A. That is correct. It represents the 2019 through
6 2020 -- excuse me -- 2020 through 2022 is three years.

7 Q. So that's another change in the PowerPoint that
8 Mr. Rosenbaum didn't mention.

9 A. Yes. Page 12, we need to change 2022 DHIA to 2020
10 to 2022 DHIA.

11 Q. In that case, let's go look at page 23 of
12 Exhibit 98, your prepared testimony.

13 The MCP order average -- is this weighted average,
14 by the way, the DHI?

15 A. The DHI is weighted by Federal Order milk. It is
16 not weighted by -- it is -- it is weighted averages, yes.

17 Q. Okay. So Order 131, Arizona, for 2022, 3.37
18 protein, not all that different from the weighted average
19 for the MCP orders of 3.39.

20 A. No.

21 Q. Would you agree with me?

22 A. Yes. No, I would not -- I would agree with you.
23 That -- from the average, it is not different. From PNW,
24 it is.

25 Q. Pardon?

26 A. I said from the average, it is not that different.
27 From the Pacific Northwest, which is what was used to
28 assume that order, it is significantly different. You are



1 correct, it is very close to the 3.39.

2 Q. But in your data, the two numbers are very
3 similar?

4 A. Yes.

5 Q. And, in fact, starting in the first year of the
6 DHI data, in Table 3 of your prepared statement, Arizona
7 starts with 3.15% protein, which is the same as the
8 starting point for the fat/skim orders, 3.15% protein,
9 correct?

10 A. Yes.

11 Q. And just slightly less than the average in the MCP
12 orders of 3.19% protein?

13 A. Yes.

14 Q. And at that time, the MCP orders had been
15 operating as MPC orders for a few years already, correct?

16 A. Well, it depends on the market.

17 Q. It depends on the market.

18 A. Some are new. Some have been around since the mid
19 '90s. The case of Great Basin since --

20 Q. Great Basin was one -- the rest of --

21 A. It was one, which got voted out, moved to Western.
22 But, yes, they have been around, most of them for at least
23 five to six years.

24 Q. So I -- I notice that the Arizona order, though,
25 starting at about the same place as the fat/skim orders
26 total, moved up to pretty close to the MCP orders.

27 A. Which is explainable. They have had a strong
28 protein premium program in Arizona for at least 25 years.



1 Q. So -- so they have a private MPC program that
2 produced an incentive to increase protein contents?

3 A. Yes, in cooperation with one of their largest milk
4 buyers. And probably their largest milk buyer in Arizona,
5 they had a protein incentive program back when I was at
6 Jersey in the mid '90s that we were working on.

7 Q. Largest milk buyer being the cheese plant?

8 A. Yes, Schreiber Foods.

9 Q. Schreiber Foods. Okay.

10 And the other large buyer there might be United
11 Dairymen --

12 A. Yeah, the union --

13 Q. -- the union plant?

14 A. I would guess that's the second largest, yes.

15 Q. Okay. Do you know if their private MCP program
16 also includes milk going to the powder plant?

17 A. Well, I can tell you -- I don't want to get
18 proprietary, but the milk that is sent to Schreiber is
19 standardized, so all that milk goes through the powder
20 plant. So that protein is standardized before it goes to
21 Schreiber.

22 Q. Okay.

23 A. So it does go through that plant. But it's sold
24 to Schreiber on a different formula than the nonfat dry
25 milk price.

26 Q. Okay. And I think in your response to questions
27 by Mr. Rosenbaum, you also noted that a large part of the
28 country has milk that is not regulated under the Federal



1 Order, but which is priced on some kind of multiple
2 component basis?

3 A. That is correct.

4 Q. And in -- are you aware that in -- strike that.
5 We're talking about the old Great Basin area,
6 Idaho, which has a large volume of milk, correct?

7 A. Yes. Very much.

8 Q. Are you aware that some of those private pricing
9 plans don't use exactly the MCP program that the Federal
10 Order uses but instead uses a cheese yield formula,
11 which --

12 A. Yes.

13 Q. -- adjusts based on the relationship between fat
14 in the milk and protein in the milk; is that correct?

15 A. It is. I wrote them when I was there. We updated
16 them.

17 Q. I'm sorry. You have to speak louder.

18 A. I'm sorry. When I -- I'm sorry, my voice is
19 fried.

20 I helped write -- revise those when I worked for
21 Glanbia in Idaho. And, yes, they are DRU formulas. Some
22 adjust for fat-to-protein ratios. Some do not. They tend
23 to use whey protein concentrate in the case of Glanbia
24 rather than whey because they make whey proteins. They
25 use the average of -- average of mostly weekly WPC34
26 price. But they are yield-based pricing. They also tend
27 to use CME 90, not NDPSR prices.

28 Q. Okay. In the seven federal MCP orders, when the



1 rules are applied, the same per unit per pound price
2 applies to protein in each of those markets, correct?

3 A. Yes. The minimum price is the same in all MPC
4 markets.

5 Q. I'm glad you used that term minimum price.

6 So there's a uniform Class III minimum price in
7 those markets that makes protein prices the same for all
8 competitors?

9 A. Within the Federal Orders, yes.

10 Q. And the same is true for the solids nonfat price?

11 A. Yes.

12 Q. And the same is true for the other solids price?

13 A. Yes.

14 Q. Okay. But within the fat/skim markets, if I
15 understand your testimony correctly, that does not apply?

16 A. That would be correct.

17 Q. And within the fat/skim markets, as we see the
18 chronological chart on page 23 of your testimony,
19 Exhibit 98, in each year, the protein content is greater
20 than that assumed in the federal formula?

21 A. That is also correct.

22 Q. And that also has been rising?

23 A. It has. In a slower rate, but it has been rising.
24 But it is below the national average.

25 Q. That's true. If one were to compare the uniform
26 protein price, then, and apply it to the protein content
27 of skim milk in the fat/skim orders, is it your complaint
28 that -- do we not agree that that -- those handlers have



1 been underpaying for the protein they receive under the
2 current system?

3 A. Unless they have a voluntary incentive plan, their
4 protein price has been lower. Perhaps a few times in the
5 summer not, but generally, yes.

6 Q. Would you also not agree that Proposal 1 and 2
7 would bring those payments, on average, closer to what
8 their competitors are paying for protein and solids nonfat
9 in the MCP market?

10 A. Depends on their tests. And aren't we talking
11 minimum pricing here?

12 Q. Yes, we are.

13 A. Because you could -- you would actually overcharge
14 them. Are we going to -- are we going to -- we need to
15 find the right way to keep those prices equal -- I think I
16 know where you are going -- but we -- we -- they should be
17 the same in all markets for fairness on a minimum price,
18 in my personal opinion.

19 Q. Okay.

20 A. And none of the solutions of the current does
21 that, unfortunately.

22 Q. Okay. Would you agree -- or did you read or hear
23 the testimony of Erick Metzger?

24 A. Yes.

25 Q. Okay. Would you agree with Erick Metzger's
26 conclusions that the existing system undercharges
27 Class II, III, and IV handlers in -- in the Southeast
28 markets, considerably, but the proposal in Proposals 1 and



1 2 would overcharge them a little bit?

2 A. I think it would overcharge them significantly,
3 and I have some data from one of our members that will
4 show -- show that. They will be testifying themselves.
5 It really varies from plant to plant. Let's go back to
6 USDA's chart. There was a very clever chart they put
7 together on ranges of tests within plants. They vary a
8 lot. And the only way you solve that is if you price on
9 pounds of components for II, III, IV, otherwise you still
10 have a lot of difference between plants. It's very easy
11 to do.

12 Q. There was a producer here earlier in the hearing
13 from Southern Indiana, Holland, Indiana.

14 Did you hear her testimony?

15 A. Yes. Full disclosure, she's a personal friend.
16 Yes, I did.

17 Q. Yeah. And she testified that she has worked to
18 increase the component content of fat in her milk.

19 Did you hear that?

20 A. Yes.

21 Q. And we have also heard that when you increase the
22 fat content, the protein content tends to follow.

23 A. It does tend to follow, not as strong as the
24 relationship between protein and SNF, but there's
25 certainly a positive relationship.

26 Q. Okay.

27 A. It also depend on your genetic selection. I mean,
28 that's in general -- most people who select for fat, they



1 are going to get their protein, but it -- those
2 relationships on genetics are not identical. It has a lot
3 to do with selection. In general, though, it is true as
4 Dr. Van Amburgh talked about.

5 Q. They are not precisely correlated, but they are
6 related?

7 A. Yes, they are certainly related. And they are
8 fairly strongly related. I wouldn't say they are not.

9 THE COURT: Mr. Vetne, when you come to a logical
10 stopping point, I think we -- we're there.

11 MR. VETNE: Fine with me.

12 THE COURT: All right. With that, we're adjourned
13 for today. We'll see everyone back here at 8:00 a.m.
14 tomorrow. Thank you. Thank you for helping us make use
15 of that time.

16 (Whereupon, the proceedings concluded.)

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1 STATE OF CALIFORNIA)
) ss.
 2 COUNTY OF FRESNO)

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4 I, MYRA A. PISH, Certified Shorthand Reporter, do
 5 hereby certify that the foregoing pages comprise a full,
 6 true and correct transcript of my shorthand notes, and a
 7 full, true and correct statement of the proceedings held
 8 at the time and place heretofore stated.

9

10 DATED: September 7, 2023
 11 FRESNO, CALIFORNIA

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17 MYRA A. PISH, RPR CSR
 18 Certificate No. 11613

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