

**CERTIFIED
TRANSCRIPT**

NATIONAL FEDERAL MILK MARKETING ORDER
PRICING FORMULA HEARING

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

Before the Honorable Jill Clifton, Judge

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Carmel, Indiana
November 30, 2023

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Reported by:

MYRA A. PISH, RPR, C.S.R.
Certificate No. 11613

1 A P P E A R A N C E S:

2 FOR THE USDA ORDER FORMULATION AND ENFORCEMENT DIVISION,
3 USDA-AMS DAIRY PROGRAM:

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

8 FOR THE MILK INNOVATION GROUP:

9 Charles "Chip" English
10 Grace Bulger

11 FOR THE NATIONAL MILK PRODUCERS FEDERATION:

12 Nicole Hancock
13 Brad Prowant

14 FOR SELECT MILK PRODUCERS, INC.:

15 Ryan Miltner

16 FOR INTERNATIONAL DAIRY FOODS ASSOCIATION:

17 Steve Rosenbaum

18 FOR THE AMERICAN FARM BUREAU FEDERATION:

19 Dr. Roger Cryan

20 FOR LAMERS DAIRY:

21 Mark Lamers

22 FOR DAIRY FARMERS OF AMERICA:

23 W. Todd Miller

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

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1 THURSDAY, NOVEMBER 30, 2023 -- MORNING SESSION

2 THE COURT: Let's go back on record.

3 We're back on record. It's 2023, November 30, can
4 you believe it. It's about 8:02 in the morning.

5 Are there any preliminary matters before we resume
6 the testimony of Dr. Cryan?

7 I see none. Dr. Cryan, you may return to the
8 witness stand -- or, no, we're going to do -- we're just
9 getting a mic ramped up.

10 MS. TAYLOR: Your Honor, I think -- I have talked
11 to the parties, and this morning we would like to start
12 with Mr. Vanden Heuvel and do his testimony, and then
13 return to Dr. Cryan after that.

14 THE COURT: Mr. Vanden Heuvel, you are blessed
15 indeed. I have been handed a copy of your testimony. I'm
16 going to mark that as Exhibit 385.

17 (Thereafter, Exhibit Number 385 was marked
18 for identification.)

19 THE COURT: Now, does this document have any other
20 number?

21 MS. TAYLOR: It does not, Your Honor.
22 Mr. Vanden Heuvel is here representing the Milk Producers
23 Council out of California, and so we would just have this
24 marked as the next exhibit number.

25 THE COURT: 385. All right. And so that's how it
26 will show in the web version.

27 MS. TAYLOR: Yes.

28 THE COURT: Very good.



1 Would you please state and spell your name.

2 THE WITNESS: My name is Geoff Vanden Heuvel. And
3 that's Geoff, and V, as in Victor, A-N-D-E-N, and then
4 capitol H-E-U-V, as in Victor, E-L.

5 THE COURT: All right. And there's a space
6 between "Vanden" and "Heuvel"?

7 THE WITNESS: That is correct.

8 THE COURT: All right. And Geoff, G-E-O-F-F?

9 THE WITNESS: Correct.

10 THE COURT: Thank you.

11 Have you previously testified in this proceeding?

12 THE WITNESS: I have not.

13 THE COURT: I would like to swear you in.

14 GEOFF VANDEN HEUVEL,

15 Being first duly sworn, was examined and
16 testified as follows:

17 THE COURT: You may proceed.

18 THE WITNESS: Well, first of all, thank you so
19 much for allowing me to take the stand and kind of barge
20 in. Been following the proceedings, and really appreciate
21 the accommodation of everyone, so thank you.

22 Milk Producers Council is a non-profit
23 organization representing dairy families throughout
24 California. Since 1949, our Board of Directors and staff
25 have worked on behalf of our members on local, state, and
26 national issues, with topics ranging from milk pricing
27 policies to environmental regulations and any other
28 regulatory and policy challenges facing dairy families



1 today.

2 My name is Geoff Vanden Heuvel, and I have been
3 the director of regulatory and economic affairs for MPC
4 since June of 2018. Prior to that, I was a dairy farmer,
5 operating nearly 39 years in Southern California. I also
6 served as a board member of MPC since the early 1990s, and
7 prior to that, served on the board of another dairy farmer
8 trade association. I was an active participant in the
9 California state milk order, testifying at nearly every
10 milk pricing hearing held by the California Department of
11 Food and Agriculture since 1985. I testified at the
12 Federal Order Reform Formulation hearing in Alexandria,
13 Virginia, in May of 2000 as a witness --

14 MS. MCMURTRAY: Your Honor, could we just ask the
15 witness to watch his speed a little bit?

16 THE COURT: So, not only so that we can take
17 notes, but also so that the transcript will be exactly
18 what you said, we need you to just pace your testimony.

19 THE WITNESS: I'd be happy to do that.

20 I testified at the Federal Order Reform
21 Formulation hearing in Alexandria, Virginia, in May of
22 2000 as a witness for Select, Continental, and Elite
23 Cooperatives in the Western States Dairy Producer Trade
24 Association. My expertise was on the California pricing
25 system, which utilized a product value formula to
26 establish minimum pricing for the state order. Since
27 Federal Order Reform was moving the Federal Milk Marketing
28 order system to a product value formula system in 2000, I



1 was able to provide some knowledge and experience about
2 how that system worked in California.

3 Before I get too far into this testimony, Milk
4 Producers Council wants to thank USDA for responding
5 positively to the California producer community's request
6 to come under the jurisdiction of the FMMO program. The
7 California FMMO hearing was long, it lasted nearly 40
8 days, and required a significant investment of time,
9 money, and effort, by all concerned, including Your Honor,
10 who we really appreciated having out in Clovis for all
11 that time.

12 I am here to report that the California Federal
13 Milk Marketing Order has had a significant impact on the
14 mailbox price of California producers. The chart below is
15 a visual demonstration of that impact.

16 Now, let me go a little bit off written testimony
17 to kind of explain this chart. The red line represents
18 November of 2018, which is when we became a Federal Order.
19 And taking the 56 months following the adoption of the
20 FMMO, which is all the data that we have, and going back
21 56 months, you can see what happened to California mailbox
22 prices compared to the all-FMMO mailbox price. The
23 benefit of the USDA's mailbox milk price data series is it
24 covers a long period of time, and it also has various
25 states that also they have mailbox price for. So we have
26 a California mailbox price that goes back, and we have an
27 all-FMMO mailbox price. And you can see it's actually
28 rather dramatic, the change.



1 When you take the average of the 56 months leading
2 up to FMMO adoption, the California mailbox price was
3 \$1.42 hundredweight on average below the FMMO average.
4 And when you take the 56 months following, we are now
5 tracking the mailbox price in the Federal Orders. When
6 you take this \$1 plus per hundredweight difference in
7 mailbox milk prices times the 40 billion pounds of milk
8 produced in California, it results in the increase of over
9 \$400 million in annual California producer income.

10 In addition, and even more important, is the fact
11 that California producers are now on a level policy
12 playing field with our colleagues in the rest of the
13 Federal Order system. That fact has benefits not only for
14 California producers, but also supports the ability of
15 USDA to sustain a national coordinated dairy pricing
16 policy and regulation. It took a tremendous amount of
17 effort by many people in the industry, and many people at
18 USDA, to get this result, and we are profoundly grateful.

19 Moving on to the subjects that are part of the
20 call of this hearing. The government is involved in milk
21 price regulation because long ago we decided as a nation
22 that an ample supply of fresh and wholesome milk at prices
23 that were affordable for consumers was in the public
24 interest. The perishable nature of milk and the inherent
25 imbalance in market power that that perishability creates
26 is what leads to a role for the government to become the
27 referee between milk processors and producers.

28 In a normal business relationship, sellers do not



1 have to sell and buyers do not have to buy. A transaction
2 occurs when a willing buyer and a willing seller agree to
3 a price.

4 When it comes to milk, because it is highly
5 perishable, the producer cannot hold his product, the
6 processor does not have to buy, at least not that day, and
7 so this leads to an imbalance in marketing power between
8 producers and processors.

9 What we have today in the Federal Milk Marketing
10 Order program is as a result of over 85 years of the
11 government playing the role of a referee amongst the
12 various actors in the dairy industry.

13 What has made this system work for so long has
14 been the fact that the FMMO system discovers the value of
15 milk, it does not bureaucratically establish that value.
16 It then transmits the market value through the regulation
17 to establish appropriate minimum prices for the various
18 uses of milk.

19 The starting point for building a market-based
20 regulatory system is finding a competitive value for milk.
21 For decades, the Minnesota-Wisconsin price series provided
22 this price discovery. Dairy plants buying raw,
23 unregulated Grade B milk in Minnesota and Wisconsin were
24 surveyed and reported what they paid for milk in an
25 unregulated market. There were no explicit
26 Make Allowances or yields in the pricing series, simply a
27 hundredweight value on a components test. This milk price
28 then became the building block for establishing regulated



1 Grade A milk prices in the FMMO system.

2 Eventually there was not enough unregulated
3 Grade B milk in Minnesota and Wisconsin to confidently use
4 this price series to accurately determine the market value
5 of raw milk. The alternative was to move one step away
6 from raw milk and use basic products made from milk as the
7 starting point and then back into a milk value by
8 adjusting for yields and conversion costs. This is the
9 system we have today, and this hearing is about updating
10 the various parts of the conversion formulas that are used
11 to discover the competitive value of milk.

12 The understanding that we are trying to discover
13 the value of milk shapes our positions on the various
14 proposals that are part of this hearing. There are a
15 number of competing interests that have to be balanced as
16 these adjustments are considered. MPC greatly appreciates
17 the care and deliberation the National Milk Producers
18 Federation went through to develop their package of five
19 proposals. MPC endorses and supports the entire package.

20 MPC supports Proposal 1 by NMPF and has no
21 objection to Proposal 2 by National All-Jersey, both of
22 which seek to adjust the component values in the Class III
23 and Class IV skim milk formulas to reflect higher solids
24 content and average producer milk in the country. We hear
25 the objections by the Class I handlers that they do not
26 have the ability to recover the value of increased
27 standard components, which Proposal 1 and 2 suggest. Our
28 response is that the handlers' objections are missing the



1 point.

2 What the FMMO formulas do is establish a base
3 value from which the Class I value is derived. Dairymen
4 have increased the component levels in raw milk over the
5 past 20 years, and those components have value in the
6 competitive manufacturing dairy market. That competitive
7 value of milk is the base price from which Class I values
8 are determined. Class I markets have their own pricing
9 dynamics unique to that market, and what the FMMO does is
10 establish a differential value for Class I based on the
11 competitive value of milk for manufacturing.

12 The milk components are relevant in the
13 manufacturing of dairy products and the levels need to be
14 updated to reflect the higher component levels in the
15 milk. This increased value must then be recognized in the
16 base competitive value the FMMOs use to establish the
17 Class I value.

18 Proposal 3 is to eliminate the 500-pound barrels
19 from the Class III pricing formula. MPC was already in
20 support of this proposal prior to the hearing, but had
21 that support solidified when we considered the compelling
22 testimony of Mr. Paul Bauer, the CEO of Ellsworth
23 Cooperative Creamery of Ellsworth, Wisconsin. Ellsworth
24 makes barrel cheese, and in his testimony he was adamant
25 that having a separate barrel calculation in the Class III
26 formula was distorting to price -- the price discovery
27 mechanism and needed to be eliminated. We found his
28 argument compelling.



1 We did appreciate the effort by Dr. Bozic to
2 propose a natural outgrowth idea of adjusting the weighted
3 barrels in the survey by collecting more price and volume
4 data from cheddar cheese makers, but eliminating the
5 barrels from the formula altogether is the best option in
6 our view.

7 Proposal 4 by the American Farm Bureau to add
8 640-pound blocks is interesting, but it seems from
9 testimony that 640-pound blocks are essentially priced off
10 of the 40-pound block price and, therefore, if barrels are
11 eliminated, there is no need to open the door for more
12 complication by adding the 640-pound barrels.

13 THE COURT: May I stop you there? We would like
14 to adjust your words in that paragraph. We're on page 4,
15 the second full paragraph, and what you've said is,
16 "40-pound block price."

17 THE WITNESS: That's what it should have been
18 written.

19 THE COURT: So we'll make that correction on the
20 original, "40-pound block price," and you may resume.

21 THE WITNESS: Proposal 5 by the American Farm
22 Bureau is to add unsalted butter to the Class IV formula.
23 Here we were persuaded by the bulk butter makers that
24 unsalted butter is not the standard commodity product that
25 salted butter is, and no giant change to the existing
26 butter product in the formula is warranted at this time.

27 Proposal 6 by the California Dairy Campaign to add
28 mozzarella as a product category for the discovery of



1 price in the Class III formula is well-intentioned, but
2 significantly misses the mark as a viable proposal for
3 consideration. The testimony we heard about the
4 variations in mozzarella cheese packaging sizes and the
5 lack of a standardized and recognized yield in
6 manufacturing cost for mozzarella make this proposal
7 non-viable at this time.

8 Proposal 7 by National Milk Producers Federation
9 to update the Make Allowance factors in the Class III and
10 IV formulas is a balanced approach given the obvious
11 increases in the basic cost of labor and energy that have
12 occurred since these factors were last adjusted in 2008.
13 We appreciate and support NMPF's adjustments, recognizing
14 that NMPF represents the vast majority of producer-owned
15 cooperatives who themselves own and operate dairy
16 manufacturing plants of all of the dairy products used in
17 the Class III and IV formulas.

18 THE COURT: Now, I'm just going to ask you to slow
19 down a little bit more as you go forward.

20 THE WITNESS: We have seen the reports produced by
21 Dr. Stephenson and find them interesting. Obviously,
22 those reports have the limitation of being voluntary and
23 unaudited. The manufacturing cost surveys that were done
24 by the State of California for their milk order are often
25 held up as a model for the FMMO to follow. We have a lot
26 of experience with the California system, and even in
27 California, the manufacturing cost studies informed
28 decision-making, but did not dictate specific outcomes.



1 Our experience with California and our
2 observations today about manufacturing cost studies that
3 may be done by USDA in the future is there needs to be a
4 lot of transparency about how the studies allocate cost
5 within plants that make multiple products, some of which
6 are not products that are part of the National Dairy
7 Products Sales Report (NDPSR) that establishes the product
8 values in the FMMO formulas.

9 The main reason these studies cannot dictate
10 Make Allowance outcomes is that the purpose of the
11 exercise -- by "exercise," I mean what we're doing here in
12 setting prices -- is to establish a competitive value for
13 milk and isolating only those products and costs that are
14 associated with the NDPSR reportable products for
15 consideration of setting Make Allowances in the formula
16 would miss out on evaluating the totality of manufacturing
17 enterprise.

18 As has been said at this hearing, setting
19 Make Allowances in other parts of the Class III and IV
20 formulas is as much art as it is science. We think that
21 comparing a couple of long-running datasets USDA compiles
22 can help provide context and direction for what level
23 adjustments should be made in the Class III and IV
24 formulas.

25 I'm going to ask you to turn to the next page
26 which has the chart on it, and I'm going to describe
27 what's on that chart.

28 THE COURT: Now we're on page 6 of Exhibit 385.



1 THE WITNESS: We're on page 6 for the chart, and
2 the narrative is on page 5. And let me point out on the
3 chart, probably should have labeled it, the left column,
4 the constant is the zero, that's the mailbox price that
5 would be the dollar sign across, and the change is the
6 all-milk price in blue above and below the line there.

7 So here is a comparison of the difference between
8 the national all-milk price and the national mailbox price
9 for all the months since the beginning of Federal Order
10 Reform in 1999. This comparison between the gross milk
11 price paid to producers before deductions, which is the
12 all-milk price, and what they get in their mailbox after
13 deductions, which is the mailbox price, does experience
14 some spikes in the early 2000s, and then noticeably
15 narrows after the Make Allowance adjustment in 2008.

16 Now, you can see the green line, that is 2008 when
17 the Make Allowance adjustment took place. You can see
18 there was a marked change in that relationship. It stays
19 stable with mailbox prices, even exceeding the all-milk
20 price for significant periods up until 2015. This data
21 seems consistent with testimony we have heard in this
22 hearing that the Make Allowance granted in 2008 was more
23 than adequate to cover the costs of many manufacturing
24 plants.

25 The gap then begins to widen in 2015 and '16, and
26 then moves up steadily in 2017 and beyond, indicating
27 greater milk check deductions, possibly to cover lower
28 returns to manufacturing assets. The gap spikes in the



1 pandemic era, and then returns back to a high, but more
2 consistent level, with the immediate pre-pandemic period.

3 We believe it is no accident that calls in the
4 industry for changes to Make Allowances have intensified
5 since 2017. We understand this and support changes to the
6 Make Allowance. The question is, how much change is
7 appropriate? NMPF is proposing about \$0.55 adjustment in
8 both Class III and Class IV Make Allowances. It looks
9 from the data that if a \$0.55 adjustment is made, and it
10 flows through to the mailbox price as this chart indicates
11 it might, that adjustment would definitely bring the gap
12 between the all-milk price and the mailbox price back down
13 to a more historically normal range.

14 There is a commitment by NMPF to improve the
15 manufacturing cost and yield data collection, but for now,
16 the Make Allowance adjustments NMPF has proposed are very
17 reasonable and defensible, and MPC supports them.

18 Picking up on page 6 below the chart. As for
19 Proposals 8 and 9, we strongly oppose these nearly
20 identical Make Allowance adjustment proposals by the
21 Wisconsin Cheese Makers and the International Dairy Foods
22 Association. As we have stated earlier, the cost survey
23 should be considered, but the objective here is to
24 discover a minimum national value for milk used in
25 Class III and Class IV manufacturing.

26 The limitations of using a product value formula
27 as opposed to a direct survey of prices paid for milk is
28 that every manufacturing plant is different. The



1 competitive environment for each plant is different.
2 Manufacturing cost studies, even if audited and mandatory,
3 can only tell you so much. There is a judgment call AMS
4 must make when they establish a specific Make Allowance.
5 As we see in the comparison chart between the U.S.
6 all-milk price and the national mailbox price, there is
7 room to adjust, but the magnitude of the change contained
8 in Proposals 8 and 9 is way too large and should be
9 rejected.

10 Proposal 10 by Select Milk Producers seeks to
11 change the butterfat recovery percentage from 90% to 93%.
12 While we are certain that most cheddar cheese plants
13 capture more than 90% of the butterfat into the cheese,
14 the current Class III formula does value the 10% of the
15 butterfat that the formula assumes does not make it into
16 the cheese at essentially the full Class IV butterfat
17 value. Therefore, all of the butterfat in Class III is
18 priced at the market value, and until there is more and
19 better information, including industry discussion on the
20 mechanics of the Class III formula, we think that the
21 current Class III formula should remain in place.

22 Proposal 11 by Select Milk Producers seeks to
23 change the farm-to-plant shrink factors in the formulas.
24 We think this issue has merit for discussion in the
25 future, but for this hearing, we do not support this
26 change.

27 Proposal 12 by Select Milk Producers seeks to
28 update the nonfat solids factor in the Class IV formula by



1 explicitly considering the contribution of buttermilk
2 solids to the product value portion of the formula. We
3 agree with Select that the contribution of buttermilk
4 solids is meaningful and should be added into the Class IV
5 formula at the next opportunity where the Class IV formula
6 is part of the hearing call.

7 But for this hearing, NMPF made adjustment
8 proposals based on an assumption that the yields in the
9 Class III and Class IV formulas would not be changed at
10 this time. Select's Proposal 12 would be a major change
11 to the Class IV yield with substantial impacts on the net
12 Class IV price. While we think this item deserves serious
13 consideration and industry discussion in the future, we do
14 not support making this change at this time.

15 Proposal 13 by NMPF seeks to return the base
16 Class I milk price to using the higher-of Class III or
17 Class IV, as was in place prior to May of 2019.

18 THE COURT: Would you read that sentence again?
19 There's a lot in that sentence.

20 THE WITNESS: Proposal 13 by NMPF seeks to return
21 the base Class I milk price factor to using the higher-of
22 Class III or Class IV, as was in place prior to May of
23 2019. Milk Producers Council strongly supports this
24 proposal. Associating milk with the Federal Order is
25 essentially a voluntary decision for all milk that is not
26 Class I. That decision to associate with the order is
27 made after the month is over, when prices are known.
28 Essentially affiliating with the order has to be



1 incentivized in close to realtime.

2 With this reality, it is absolutely critical that
3 the structure of the Class I pricing formula results in
4 Class I being the highest class price most, if not all the
5 time. Under a higher-of Class I base price formation,
6 that reality is embedded into the structure of the pricing
7 formula. Yes, there are months when the increase in
8 either Class III or Class IV might be dramatic and for
9 that month surpass the Advanced Class I price, but with a
10 higher-of Class I structure, the next month the Class I
11 prices will catch up.

12 Under the current average-of plus \$0.74, we are
13 discovering periods of time where Class I prices are in
14 misalignment with one or the other of the manufacturing
15 classes for extended periods of time. This undermines the
16 integrity of the whole premise of price alignment in the
17 FMMO program and must be changed to assure the long-term
18 success of the system.

19 Proposals 14 and 15 by IDFA and the Milk
20 Innovation Group try to preserve the average-of announced
21 Class I base price by proposing a mechanism to change the
22 adjuster over time to make up for the negative difference
23 between what a higher-of price would generate and what the
24 average-of mechanism generated. What these proposals fail
25 to recognize is the damage that is done to the entire
26 structure of the FMMO system when there is a misalignment
27 of prices between Class I and the other classes. Milk
28 Producers Council is a strong supporter of the FMMO



1 system, and we see those proposals as undermining the
2 ability to correctly discover the market value of milk and
3 then translate that value into a properly-aligned Class I
4 price in realtime.

5 Proposal -- Proposal 16 by Edge Dairy Farmer
6 Cooperative wants to change the Class I base price by
7 tying it to Class III alone with an adjuster that would
8 take years to make up for any negative difference this
9 method would have from returning to the higher-of. It
10 would also eliminate advanced pricing for Class I. The
11 basing of Class I on Class III alone is an even bigger
12 step backwards than Proposals 14 and 15 and creates the
13 opportunity for a major price misalignment between Class I
14 and the other classes.

15 Eliminating advanced pricing for Class I is also a
16 terrible idea. The fact that Class I handlers know their
17 milk price in advance and that they know that their
18 competitors are all similarly regulated are key factors in
19 preserving the integrity of the FMMO system.

20 Proposal 17 by Edge and Proposal 18 by the
21 American Farm Bureau support returning to the higher-of
22 Class III or Class IV for establishing the base Class I
23 price, but to eliminate advanced pricing for Class I and
24 Class II. We have listened with interest to the extensive
25 testimony in this hearing about hedging and what a
26 wonderful thing it is.

27 The fundamental reason the government is involved
28 in regulating milk pricing is because of the inherent



1 imbalance in market power between producers of fresh milk
2 who have to sell their product every day to a buyer who
3 does not have to buy every day. That inherent imbalance
4 is mitigated by the FMMO system which discovers the market
5 value of milk and then translates that value throughout
6 the system.

7 Hedging is just contracting or deregulation by
8 another name. Milk Producers Council is unpersuaded that
9 the balance of interest AMS must consider in making a
10 decision on the various proposals that deal with the base
11 Class I price necessitate adopting the radical approach of
12 eliminating advanced pricing for Class I. Hedging tools
13 should react to FMMO rules, not dictate those rules. The
14 tail must not wag the dog.

15 Proposal 19 by National Milk Producers Federation
16 is a comprehensive proposal to adjust Class I
17 differentials for all 3,108 named counties in the
18 continental U.S. Milk Producers Council is most familiar
19 with the Class I differential updates proposed for
20 California. We have read the testimony of the California
21 Dairies representative on Proposal 19 and find it to be an
22 accurate reflection of our thoughts. Therefore, we fully
23 support NMPF's Proposal 19.

24 Proposal 20 by the Milk Innovation Group seeks to
25 reduce the base Class I differential by \$1.60, essentially
26 decimating the Class I price surface -- the FMMO Class I
27 price surface. If MIG Proposal 20 was adopted, it would
28 substantially eliminate the incentive of milk to associate



1 with the FMMO, and because of that, likely end producer
2 support for the FMMO system. Therefore, MPC strongly
3 opposes Proposal 20.

4 Proposal 21 by the American Farm Bureau seeks to
5 raise the Class II differential. AFB makes some important
6 point to justify an increase in the Class II differential,
7 and MPC is supportive of Proposal 21.

8 In conclusion, the fundamental challenge facing
9 dairy farms is that we produce a highly perishable product
10 that requires significant investment of capital and time
11 to create, that must be sold every day to a buyer that
12 does not need to buy every day. Convenient access to milk
13 and dairy products at reasonable prices is in the public
14 interest. The FMMO's role is to be a referee of the
15 relationship between producer and processor. For this
16 system to be successful, the price regulation needs to be
17 based on market values.

18 For 85 years, the FMMO system has successfully
19 performed this role. It is time for some adjustments and
20 updates to the basic parts of the formulas. It is not
21 time for radical change. NMPF has pointed the way
22 forward, and Milk Producers Council strongly supports the
23 entire NMPF package of proposals.

24 MPC thanks the Secretary and USDA AMS for calling
25 this hearing and for giving us the opportunity to share
26 our views.

27 That concludes my prepared testimony, Your Honor.

28 THE COURT: I wish I had read this when I first



1 started working in this hearing. It's extremely helpful
2 for you to get back to basics, I think. All right.

3 I know that a lot of your ideas are controversial
4 in this group. Does anyone need a little more time before
5 you begin your cross-examination?

6 We already have a cross-examiner. You may come to
7 the podium.

8 MR. ENGLISH: Thank you, Your Honor.

9 CROSS-EXAMINATION

10 BY MR. ENGLISH:

11 Q. Good morning, Mr. Vanden Heuvel. My name is Chip
12 English representing the Milk Innovation Group.

13 A. Good morning, Mr. English.

14 Q. I want to, for a moment, divert from my planned
15 cross-examination and focus on your last discussion and
16 the idea that, you know, now is not the time for radical
17 change.

18 Do you agree that the over 85 years we started in
19 a position where Class I utilization was something like 60
20 or 70% of the milk in the United States?

21 A. I have read the same history as you have.

22 Q. And you would agree that -- well, it used to be at
23 least above 60% Class I utilization, correct?

24 A. Probably was.

25 THE COURT: Your voice isn't loud enough.

26 THE WITNESS: Probably was.

27 THE COURT: Good. Good adjustment. Thank you.

28 BY MR. ENGLISH:



1 Q. And now, if we account for all milk produced in
2 the United States as opposed to Federal Order pooled milk,
3 that's down to 18% Class I, correct?

4 A. I'll accept your characterization. I haven't -- I
5 haven't done any of that data myself.

6 Q. Given the fact that Federal Orders primarily exist
7 to bring forth an adequate supply of milk for fluid use,
8 at what level of Class I utilization do we need radical
9 change?

10 A. Well, I don't accept your premise that may have
11 been the reason why it started was fluid milk. But, you
12 know, most things change over 85 years, and there's been
13 an evolution.

14 The thing that's remarkable about the Federal
15 Order program, is that, you know, when it was implemented,
16 New York was the largest dairy state in the U.S., the
17 biggest milk producing state. And then W.D. Hoard,
18 governor of Wisconsin, convinced the Wisconsin farmers to
19 get into dairy, and Wisconsin was able to take advantage
20 of certain competitive advantages that they had and become
21 the number one dairy state. And they reined for a while,
22 and then California took its place. And -- and in the
23 following years, you know, different parts of regions of
24 the country have been able to take advantage of certain
25 situations and build their dairy industries.

26 So what that tells me is that it's a framework
27 that has enabled the dairy industry to grow and to
28 flourish, and hasn't locked it in at any one place. So,



1 you know, if you want to narrowly define it, then that's
2 your definition.

3 The way we look at it is, is that it is a
4 framework that allows the industry to flourish.

5 Q. Within that framework, the only milk that must be
6 pooled is Class I, correct?

7 A. Correct.

8 Q. What percent of milk was pooled in California
9 under the state system versus today under the Federal Milk
10 Marketing order?

11 A. I want to make sure I understand your question
12 because it sounds like a trick question.

13 Q. It's not a trick question. It's -- okay. You
14 are -- you have been involved for --

15 A. A long time.

16 Q. -- a long time. You are from California. You are
17 an advocate of going from the California state order to
18 the Federal Order --

19 A. Absolutely.

20 Q. -- correct?

21 A. Yes. Absolutely. Yes, I was.

22 Q. So what percent of milk produced in California was
23 pooled under the California state system versus today
24 under the California Federal Order?

25 A. What percentage of the milk in California was
26 pooled?

27 Q. Yes.

28 A. Almost all of it.



1 Q. Was pooled under the state order, correct?

2 A. Yeah, under the state order, yes.

3 Q. And what percent is pooled now under the Federal
4 Order?

5 A. You know, it varies depending on, you know -- but
6 a lot less than 100%, that's for sure. Half of it. Maybe
7 half.

8 Q. And one of the arguments that you and others made
9 at the California Federal Order proceeding was that,
10 whether you call it inclusive pooling or mandatory
11 pooling, but that that segment of the California state
12 order would carry over to the Federal Order, correct?

13 A. That was the proposal of the cooperatives. I
14 wasn't part of that decision.

15 But if you allow me to expand a little bit, I
16 mean, whether it's pooled or not pooled, the Federal Order
17 classified pricing provides the benchmark, and that's a
18 very critical function. It -- the Class III, then, is the
19 standard for which producers have an expectation that, you
20 know, they compare what their cheese plant is paying them
21 compared to the Federal Order Class III price. Same thing
22 on the Class IV price.

23 So whether or not that milk is actually pooled, it
24 creates -- it -- the USDA Federal Order program provides
25 just an invaluable service by establishing that benchmark
26 price.

27 So, you know, I don't even get hung up about how
28 much is in the pool, how much is not in the pool. If you



1 want to engage in that we can, I love the conversation.
2 But that -- that's not the only function as -- you can't
3 judge the success of the Federal Order program based on
4 how much of the milk got pooled today.

5 Q. But nonetheless, if 50% of the milk is pooled and
6 50% of the milk is not pooled in California, does that not
7 result in unequal outcomes as to dairy farmers?

8 A. No, not necessarily. They all have to remain
9 competitive with each other.

10 THE COURT: They all have to remain competitive
11 what?

12 THE WITNESS: With each other. All of the various
13 buyers of the milk have to remain competitive with each
14 other. They pool when it makes sense for them to pool,
15 and when it doesn't make economic sense for them to pool,
16 they don't pool.

17 BY MR. ENGLISH:

18 Q. And that economic sense is because if a handler
19 can share in the pool proceeds, they will do so, and if
20 they don't want to contribute to the pool proceeds because
21 they are not Class I, they don't have to do so, correct?

22 A. Correct.

23 Q. And to the extent there are dairy farmers who are
24 owners of those entities that are able to pool or not
25 pool, does that not put them at a relatively different
26 position versus the farmers who do not have that
27 opportunity?

28 A. Well, every dog has its day. And, you know, we



1 have seen the last five years there have been times when
2 shipping predominantly to a cheese plant was way more
3 profitable, and then the -- you know, it went the other
4 way so --

5 THE COURT: And what was the other way?

6 THE WITNESS: The other way was shipping to a
7 butter powder operation was more profitable than shipping
8 to a cheese operation. So it flips and flops, and those
9 competitive pressures are, I would say, healthy for the
10 industry.

11 BY MR. ENGLISH:

12 Q. Is that healthy for Class I?

13 A. Well, Class I, you know, has its -- has its own
14 challenges.

15 Q. Well, one of those challenges is that it doesn't
16 have the ability to flip in or flip out, correct?

17 A. That's right, it's in.

18 Q. When proceeds that go into the pool from Class I
19 processors are spread amongst all producers serving the
20 classes, at least those who pool, what incentive does a
21 larger payout from the pool give farmers to send their
22 milk to fluid plants as opposed to simply to the
23 manufacturing plants?

24 A. I'm not sure I quite understand where you are
25 going with that, Chip.

26 Q. Well, it's not where I'm going with it that
27 matters. The question is, if proceeds that go into the
28 pool from Class I processors are shared among anybody



1 who -- other than Class I chooses to depool in a given
2 month, what incentive is there from the pool given to
3 farmers to actually ship their milk to a fluid plant as
4 opposed to a manufacturing plant?

5 A. Well, it's the cooperatives that make that
6 decision for the individual dairy farmers, so the
7 cooperatives move and they make those decisions on serving
8 those customers.

9 Q. So it's the decisions of the cooperatives, not the
10 actual level of the Class I differential, that moves milk?

11 A. Well, the cooperatives are looking for the best
12 return for the milk that they have to sell on behalf of
13 their members, and so the Class I differential is a very,
14 very important factor there.

15 Q. How important is it when the manufacturers can
16 pool or depool in any given month?

17 A. How important is it?

18 Q. Yes.

19 A. It's a feature of the Federal Order, and so, you
20 know, that's the system that we were given when USDA gave
21 us that order. The cooperatives were asking for inclusive
22 pooling, didn't get it, so they have all had to learn how
23 to -- how to operate in a system where you can pool or not
24 pool.

25 Q. When you were a dairy -- you are a retired dairy
26 farmer now, correct?

27 A. I no longer milk cows. You know, people think I'm
28 retired. I'm not retired.



1 Q. You are retired from the milking portion, correct?

2 A. That's true.

3 Q. When you were, before you retired, what
4 considerations did you make when deciding whether you were
5 going to ship to a fluid processor or manufacturer?

6 A. What considerations?

7 Q. Yes.

8 A. I shipped to Alta Dena Dairy back in the day when
9 it was owned by Deans, and felt very good because it was a
10 dairy that cared about your health, and that was their tag
11 line. I was very proud to ship to Alta Dena Dairy, you
12 know, and they paid pretty well. And so that's -- you
13 know, you asked me why I did what I did. I -- I worked
14 hard to get a contract with them and to sell them good
15 quality milk.

16 Q. How far was your farm from Alta Dena?

17 A. Around 25 miles.

18 Q. Were they your closest outlet?

19 A. They were -- yeah. I mean they were LA,
20 LA County. I was San Bernardino County.

21 Q. Did they pay a premium over the Class I price?

22 A. Yeah. They paid a premium for being BST-free back
23 in the day, which was an important thing to me, and to
24 them obviously.

25 Q. And those premiums were important to you for
26 making your decision to shipping to them?

27 A. Sure.

28 Q. So speaking about LA, the plurality of population



1 in California is in Los Angeles, right? Correct?

2 A. Boy, I don't know about that, Chip. There's a lot
3 of people there, but there's a lot of people in
4 California.

5 Q. The population of Los Angeles has been growing
6 substantially over the last five to ten years?

7 A. You know, I don't want to get nitpicky with you,
8 but the city of LA or LA County or -- you know, I mean,
9 there's like 80 cities in LA County, so...

10 Q. Well, let's use LA County.

11 A. Has it really been growing? I don't know. I
12 think the average price of a house there is \$700,000 or
13 something like that. I really don't know. There's a lot
14 of people in Southern California, but there's a lot of
15 people leaving Southern California, too.

16 Q. How about the milk production in Southern
17 California?

18 A. That's leaving. Dramatically being diminished.

19 Q. And how about the incentive to ship to the plants
20 that remain in Los Angeles, is that harder every day?

21 A. Well, it's -- it's -- I would imagine it's -- it's
22 a tough place to get into and out of.

23 Q. So I want to change the subject now and talk
24 about, in California, what percent of milk is sold by
25 cooperatives as opposed to independent shippers?

26 A. I understand that, like, 85% of the milk is
27 cooperative, 85 to 90.

28 Q. But you were independent shipper, correct?



1 A. I was. Well, there was part of my career I had a
2 small cooperative that I actually ran that shipped to a
3 cheese plant in San Bernardino, so I did that for, I don't
4 know, eight or nine years. But for the rest of my career
5 I was pretty much -- well, no, I was part of the state
6 dairy association earlier in my career. So about half I
7 was in the cooperative, half I was independent.

8 Q. To your knowledge, since you are still involved in
9 the industry, do you -- are there cooperatives in
10 California that have base/excess programs today?

11 A. Yes, I believe there are.

12 Q. And just generally, when you and I use the term
13 "base/excess plant" what do you mean?

14 A. Yeah. Some sort of limitation on, you know, you
15 can ship so much milk without penalty, and then if you
16 ship more than that, then there's some sort of a -- of a
17 penalty.

18 Q. Were there base/excess plant programs in effect in
19 California when you were shipping to Alta Dena?

20 A. At various times in my career there were.

21 Q. And to your knowledge, do the cooperative
22 base/excess programs that exist today apply equally to all
23 members, or would a new member have a new base than
24 long-term members?

25 A. I got to say I -- you know, I'm not in a position
26 to see that. They guard that fairly closely, and I really
27 don't know the specifics of any cooperative's base/excess
28 plan.



1 Q. Thank you.

2 So turning to specific proposals. As to
3 Proposal 1, you say the component values have increased.

4 Do you know if they have increased at the same
5 rate across all farms across the country?

6 A. I do not know that.

7 Q. Have they increased at the same rate across all
8 farms throughout California?

9 A. I do not know that.

10 Q. And in California, you are aware, of course, that
11 there is a separate state fortification standard for
12 components in lower fat milks, correct?

13 A. Correct.

14 Q. And how do Class I processors meet that standard?

15 A. I believe they -- they have to supplement the
16 solids content in -- in -- in those lower fat milks where
17 they have a higher solids requirement by the state.

18 Q. And how do they do that supplement?

19 A. I'm assuming most of them use condensed solids,
20 but I -- they could use powder solids as well, I don't --
21 I don't know.

22 Q. And when they have to purchase those solids, they
23 have to pay for those components, correct?

24 A. Yes.

25 Q. So if we raise the component value that is charged
26 to processors in California and they have to buy condensed
27 in order to meet California standards, isn't there --
28 they're basically making the handler pay twice for the



1 same components?

2 A. Yeah. You know, I mean, it's a competitive issue.
3 The only thing is, is that, you know, California got an
4 exemption to that national standards, you know, years ago,
5 and they were able to maintain that, went through lots of
6 litigation. If you want to sell milk in California,
7 that's the price of doing business.

8 Q. It's a pleasure seeing you again.

9 MR. ENGLISH: I have no further questions. Thank
10 you for your time.

11 THE WITNESS: Chip, it's always great to see you.

12 CROSS-EXAMINATION

13 BY MR. ROSENBAUM:

14 Q. Steve Rosenbaum for the International Dairy Foods
15 Association.

16 I'd like to talk about Make Allowances for a
17 minute to begin with.

18 So you're aware, I'm sure, that for most of the
19 history of the Federal Order system, certainly in the
20 '60s, '70s, '80s, the price for manufacturing milk
21 products class -- what's now Class III and IV, was based
22 upon the unregulated price paid for Grade B milk in
23 Wisconsin and Minnesota, correct?

24 A. Correct.

25 Q. And you are aware that that unregulated milk was
26 Grade B milk, correct?

27 A. Correct.

28 Q. And you are aware, I assume, that there was a



1 decline in the amount of Grade B milk in those states such
2 that eventually the determination was made it was no
3 longer a suitable benchmark for value for price setting
4 purposes, correct?

5 A. Correct.

6 Q. And as a result, there was a replacement of the --
7 what's known as the MW price series, with the current
8 system, which is one that surveys the price paid for
9 certain specific manufactured products and then deducts a
10 Make Allowance, correct?

11 A. Correct.

12 Q. And after appropriate adjustments for yields and
13 things of that nature, the remaining amount of the price
14 paid for the product has to be paid over to the farmers in
15 the form of a minimum milk price, correct?

16 A. That's generally the -- yeah, that's a fair
17 characterization.

18 Q. Okay. Now -- and indeed, in the California state
19 system, I don't know the history so well, but my
20 understanding is that they also -- up until the years that
21 they ceased to exist and became part of the Federal Order
22 system, they also used a Make Allowance system where
23 there, once again, was a survey of finished product prices
24 and then a deduction of, we'll call it a Make Allowance,
25 reflecting the cost of making the products; is that
26 correct?

27 A. Yeah, that's actually -- you know, I don't know
28 how much you want to get into the history of the



1 California, how we got where we got, but it was a
2 product -- it was always a product-valued formula system.
3 It changed a lot and often, but, yes.

4 Q. Well, there was -- for example, I think there were
5 regular surveys and adjustments on a more frequent basis.

6 A. Well, there was -- we had hearings. I think one
7 year we had five hearings. We had hearings all the time.

8 Q. It was revised more frequently than the federal
9 system, correct?

10 A. It was a freak show.

11 Q. A freak show?

12 A. A freak show.

13 Q. All right.

14 A. Can you imagine having this, like, you know,
15 multiple times a year?

16 Q. I don't --

17 A. I got a smile out of you.

18 Q. I don't know anyone in this room who is going to
19 sleep well tonight as a result of that, and as a result of
20 that vision, but I will clear my mind and move on.

21 You introduced, in your discussion of
22 Make Allowances, a comparison of the difference between
23 the national all-milk price and the national mailbox milk
24 price, correct?

25 A. Yes.

26 Q. And I may have a few questions about specifics of
27 that, but let me just ask. I mean, has that ever been a
28 consideration used in the Federal Order system in setting



1 Make Allowances?

2 A. No, it hasn't, as far as I know. But, you know,
3 we have only had a product-valued formula in the Federal
4 Orders since 2000, which was the last time you and I were
5 together. And we had one hearing or I -- I'm not sure how
6 many sessions that hearing that resulted in that 2008
7 change. So it's not like we have them very often, but
8 this is a novel approach.

9 Q. Okay. So -- and correct me if I'm wrong, but this
10 wasn't used in the California system either, was it?

11 A. No. I think, if you'd permit me, I mean, you
12 know, the challenge that you have in product-valued
13 formula, and we're going to run into it -- I mean, this
14 hearing is full of testimony of trying to find the
15 appropriate level of Make Allowance. And if you only
16 focus just on a study of that product, you run -- you
17 know, I think Mr. Brown, Mike Brown was up here, one of
18 your witnesses, and I think he was specifically asked,
19 "Are you aware of any plant that only makes NDPSR
20 products?" His answer was no. Now, if Mike doesn't know
21 of a plant, there probably isn't a plant that only makes
22 NDPSR products.

23 So each plant is a business. It's part of an
24 overall business. In the MW we didn't have that -- in the
25 Minnesota-Wisconsin price series, we asked plants what
26 they paid for milk. So they were competing for a milk
27 supply, they knew and they had -- they had to -- they
28 could only pay out as many dollars as they could make, and



1 so USDA was following how much they were paying out for
2 milk.

3 When that was no longer viable, we had to move one
4 step away. We had to move to these products. The
5 difficulty is, is that these -- these are not isolated --
6 it's very difficult to isolate out a particular product
7 out of an overall operation and -- because none of these
8 plants, they are all different. They all have all these
9 different things.

10 So as I was thinking my way through how to give
11 some context to how AMS, which has to balance all of these
12 different things and come into an appropriate
13 Make Allowance, which at the end of the day, because we
14 have a product value, will have to be so many cents per
15 pound of something. How do we give it context?

16 And in -- and I -- this all-milk is the regulated
17 price before deductions, and the mailbox price is what
18 farmers receive after deductions. And when you look at
19 the relationship between those two, it was fascinating to
20 run that data and to see. Because these plants, they
21 can't ultimately, over time, pay out more for milk, the
22 mailbox price, than what they receive for the products.

23 And so I found that -- I think that that is a --
24 you know, we're early on in -- in our journey as an
25 industry through this whole Make Allowance product value,
26 and I do think it -- it is -- you know, it's not the final
27 data point, but it is the -- it does give some context
28 that I think can be helpful.



1 Q. Okay. Now, when the MW approach to setting
2 manufacturing milk prices was replaced in so-called
3 Federal Order Reform, were you aware that -- you are
4 aware, of course, that that Federal Order Reform was not
5 done through what we might call formal hearings at -- like
6 we're in right now, but rather through what is generally
7 referred to in the business as notice and comment
8 rulemaking, namely that people -- USDA published -- USDA
9 conducted various studies and published a proposed
10 proposal, people commented on it, et cetera. You are
11 aware that was the mechanism?

12 A. I was -- obviously we weren't going to be
13 regulated by it. I brought -- I was brought -- there was
14 five days worth of hearings there in Alexandria, Virginia,
15 so there was some sort of a hearing component to it. But
16 I understand there were various iterations. So exactly
17 the mechanics of how we got there, I can't say that I know
18 that I could give you exactly the path it followed.

19 Q. Okay. Are you sure you are referring to -- okay.
20 You are referring to hearings in May 2000.

21 A. Right.

22 Q. Is it your recollection that, in fact, that was
23 not part of Federal Order Reform, per se, but rather a
24 hearing subsequent to Federal Order Reform which went into
25 effect January 1, 2000, to determine whether certain
26 revisions should be made to what had already been adopted
27 in Federal Order Reform?

28 A. Okay. Well, I would take your characterization it



1 was a formal hearing, and we dealt with Make Allowances
2 and --

3 Q. Whether there should be any revisions made to the
4 Make Allowance that had already been adopted. Is that
5 your recollection?

6 A. I don't -- I don't recall that.

7 Q. Okay. All right. The record will -- I believe
8 that's accurate. I was there, too. But in any event, the
9 record will be certainly clear from formal publication in
10 the Federal Register.

11 In any event, you are aware that USDA, as part of
12 Federal Order Reform, employed the assistance of various
13 dairy economists from the around the country to try to
14 determine what the most appropriate replacement for the MW
15 approach would be, correct?

16 A. Yes.

17 Q. And do you recall anyone suggesting in that
18 process the use of the mechanism that you are proposing,
19 namely the comparison of the difference in the national
20 all-milk price and the national mailbox milk price?

21 A. Well, it wouldn't have been really relevant yet,
22 at that time. It's only relevant as you -- as you look in
23 history over these various things.

24 Q. Didn't those two numbers exist back then?

25 A. They did exist, but they didn't tell the story. I
26 mean, here we are, in 2023, looking to make adjustments in
27 a program that we have been operating for the last, you
28 know, 20-plus years. And so, you know, what -- what is



1 the appropriate level of adjustment? And given the
2 limitations of studies, you know, actual manufacturing
3 cost studies, this is another data point, this is another
4 comparison for context. And that -- I'm not saying that
5 this should dictate the outcome, I'm saying this should
6 inform the outcome.

7 Q. Other than the three pages in your testimony
8 addressing this issue, are you aware of anything else in
9 this record that makes this suggestion or addresses this
10 approach?

11 A. No. But that's why we have hearings.

12 Q. I mean, other than the chart you have -- and I'm
13 sorry, the copy I have doesn't have page numbers on it, so
14 it's the chart called "Difference Between All U.S. Milk
15 Price" and -- "Versus Mailbox U.S. Milk Price" -- other
16 than that chart, are you providing any factual data or
17 statistical analysis or anything else supporting this
18 approach?

19 A. I don't -- I don't -- I mean, the data itself is
20 USDA data, and analysis that -- you know, it speaks for
21 itself.

22 Q. But that's all -- that's what you have?

23 A. Yes.

24 Q. Okay. And so -- and you have used the terms, and
25 maybe they are so well-known that people -- everyone
26 understands what they mean, but it's probably worthwhile
27 to just get a definition on the table.

28 What is the national all-milk price?



1 A. All right. Well, I was thinking that you might
2 ask that. So on the NASS site, it says, "All-milk price
3 survey. Each month the NASS regional field offices
4 estimate the all-milk price for each of the 24 major milk
5 producing states. The all-milk price represents the gross
6 price farmers in the state received in the given month per
7 hundredweight of milk sold at the average fat test. The
8 gross price is before deductions for items such as hauling
9 and stop charges, advertising and promotion costs, and
10 co-op dues. It does not include hauling subsidies but
11 does include premiums and discounts for quality, quantity,
12 and other reasons. The price per hundredweight equals
13 total gross receipts divided by pounds of milk sold
14 multiplied by a hundred."

15 Q. And -- and the -- you listed a bunch of things
16 that are deductions, but they haven't been made from the
17 all-milk price, correct?

18 A. Correct.

19 Q. And so let's now switch to your other phrase,
20 which is your national mailbox milk price.

21 Do all of the deductions you just read, have all
22 of those deductions been taken, in other words, reducing
23 the national all-milk price when one is calculating the
24 national mailbox milk price?

25 A. Okay. So from the November 24, 2023, mailbox milk
26 price report by the Agricultural Marketing Service, it
27 says, "Methodology, Mailbox Milk Price Report" -- if we
28 could, I just might as well read this into the record.



1 Q. Go ahead.

2 A. "Definition: The mailbox price" --

3 THE COURT: Go slowly, please.

4 THE WITNESS: "The mailbox price is defined as the
5 net price received by producers for milk, including all
6 payments received for milk sold, and deducting costs
7 associated with marketing the milk.

8 "Data: Included in all payments for milk sold
9 are: Over-order premiums; quality, component, breed, and
10 volume premiums; payouts from state-run over-order pricing
11 pools; payments from super pool organizations and
12 marketing agencies in common; payouts from programs
13 offering seasonal production bonuses; and monthly
14 distributions of cooperative earnings. Annual
15 distributions of cooperative profits, earnings, or equity
16 repayments are not included.

17 "Included in costs associated with marketing milk
18 are: Hauling charges; cooperative dues, assessments,
19 equity deductions/capital returns (sic), and reblends; the
20 Federal Milk Marketing Order deduction for marketing
21 services; Federally-mandated assessments, such as the
22 National Promotion Program and budget deficit reduction;
23 and advertising/promotion assessments above the national
24 program level. Other deductions, such as loan, insurance,
25 or feed mill assignments are not included.

26 "For all markets, the mailbox price is reported at
27 the handlers' average butterfat test."

28 BY MR. ROSENBAUM:



1 Q. So if I'm hearing correctly, there are a ton of --
2 I mean, you chart the difference -- let me start the
3 question again.

4 Your chart charts the difference between those two
5 numbers, correct?

6 A. Correct.

7 Q. And if I'm hearing correctly, there a ton of
8 deductions that create this difference that have nothing
9 to do with the cost of making finished products, correct?

10 A. Well, there are a lot of things -- the -- the
11 thing about it is, is what's different?

12 Q. Can I have an answer to my question? I mean, I'm
13 just asking you --

14 A. Oh, yeah, yeah. No, there's a lot of things,
15 that's true.

16 Q. Okay. Let's switch to another topic, which is
17 Proposal 1. So this is the question -- let me phrase it
18 in practical terms. I'm not going to track the language.

19 In practical terms, the biggest impact of the
20 proposal relates to the notion that protein levels in raw
21 milk have gone up, and Proposal 1 would cause Class I
22 minimum prices to go up as a result of that.

23 Is that a fair characterization?

24 A. I think that's probably -- it would raise the base
25 Class I price though, yeah. The Class I price would go
26 up.

27 Q. I mean, and that -- and that's the way -- I mean,
28 the increased protein -- let me be a little more explicit



1 here. I mean, I'm going to leave aside for the moment
2 the -- I think it's four, maybe it's three, I think it's
3 four, non-multiple component pricing orders for now, just
4 focus on the seven, if I have the number right, orders
5 that do have multiple component pricing.

6 So are you aware that under the current
7 regulation -- let me back it up again.

8 The argument is that butterfat levels in milk have
9 gone up and protein levels have gone up, correct?

10 A. That's the argument.

11 Q. Okay. Now, are you aware that in the multiple --
12 that -- are you aware the Class I handlers have to pay
13 based upon actual butterfat levels under the current
14 regulations?

15 A. Yes.

16 Q. Okay. So Proposal 1 doesn't change that
17 obligation, correct?

18 A. Right.

19 Q. And are you aware that higher butterfat levels are
20 of value to a Class I handler even if the milk they are
21 receiving has more butterfat than they need for their
22 finished products, either whole milk or reduced fat milk,
23 because Class I handlers are permitted to remove that fat
24 and either use it to make products that need fat, like ice
25 cream, or they can just sell it on the market for people
26 who have that need, correct?

27 A. Right.

28 Q. Okay. So the order system already captures the



1 value of extra fat and makes Class I handlers pay for
2 that, correct?

3 A. Correct.

4 Q. And that hasn't been a matter of controversy, but
5 for the reasons I just stated, namely everyone recognizes
6 that, for a Class I handler, extra fat has value. If they
7 don't need it, they'll -- themselves, they will sell it
8 and can get the value that way, correct?

9 A. Sure.

10 Q. And so the question here now is, what do you do
11 about the fact that the protein levels have also gone up,
12 correct?

13 A. Well, that is a question, yes.

14 Q. Yes. And so just to orient ourselves, when it
15 comes to the pricing of the manufactured products, protein
16 levels are taken into account in setting the minimum
17 prices in the multiple component pricing formulas,
18 correct?

19 A. Correct.

20 Q. And that makes sense in that more protein -- take
21 cheese, for example, if there's more protein in the milk,
22 you can make more cheese --

23 A. Sure.

24 Q. -- it makes sense to have charged the handler for
25 that, right?

26 A. Sure.

27 Q. Okay. But when it comes to protein -- two things.
28 First of all, do you agree -- well, do you agree with me



1 with the basic proposition that with the exception of a
2 few small niche products, important but niche products,
3 higher protein is not -- and with the exception of
4 California which requires it by law -- that manufacturers
5 are not out there selling, typically, their packaged fluid
6 milk based upon protein levels, correct?

7 A. In isolation, in direct answer to your question,
8 correct.

9 Q. And are you also aware that it -- that -- and are
10 you aware the protein levels in the raw milk are actually
11 higher today than what's required as a standard of
12 identity for milk under FDA regulations?

13 A. That could be.

14 Q. Okay. But are you -- so there's no practical way
15 to remove the protein and sell it, correct?

16 A. I'm unaware of it.

17 Q. Okay. And it's illegal for a handler to water
18 down the milk --

19 A. I believe.

20 Q. -- to reduce the protein level to one that is at
21 least the minimum. You are aware of that, correct?

22 A. Yes.

23 Q. So -- so the question becomes, well, should you
24 make the Class I handler pay for that extra protein
25 anyway, correct?

26 A. That's not the question.

27 Q. You have articulated --

28 THE COURT: Whoa, whoa, whoa -- you may answer



1 what he just asked.

2 THE WITNESS: Well, go ahead and ask it.

3 BY MR. ROSENBAUM:

4 Q. You argued the answer is yes, and you've explained
5 the reasons why you think it should be yes. But I mean,
6 that's -- and I'm not suggesting you don't have your
7 reasons, but I'm just saying that is the question.

8 A. That is the question.

9 Q. Okay.

10 THE COURT: I think we need a break. 15-minute
11 break. Please be back and ready to go at 9:30.

12 We go off record at 9:14.

13 (Whereupon, a break was taken.)

14 THE COURT: Let's go back on record.

15 We're back on record at 9:30.

16 Do you remember where you were?

17 MR. ROSENBAUM: I believe I do.

18 THE COURT: You may proceed.

19 BY MR. ROSENBAUM:

20 Q. So we were talking about Proposal 1, and -- and I
21 think we finished our discussion of whether protein has
22 value to Class I handlers.

23 And your argument basically is that, well, protein
24 levels do have value to manufactured milk for the reasons
25 we have already discussed, and it's appropriate that the
26 Class I price be tied to that.

27 That is your view as to how the system should
28 work, correct?



1 A. My view is that -- is that the Federal Order
2 system determines the value of milk for manufacturing, and
3 then it translates that through the regulated minimum
4 price formulas. And so the purpose of the manufacturing
5 establishing that value is then to add on whatever they
6 deem to be appropriate as a Class I differential over
7 that.

8 Q. Well, let's focus on whether that's actually how
9 it works today because -- and, once again, focused on the
10 multiple component pricing orders, okay?

11 A. Okay.

12 Q. I mean, in a multiple component pricing order, if
13 the protein level in the milk goes up, then the -- then
14 the price for that milk used for manufacturing purposes
15 goes up, too?

16 A. Correct.

17 Q. But it doesn't go up for Class I.

18 A. I'm not sure what you mean. I mean, is that a
19 question?

20 Q. I'm asking you. I mean, is it -- well, isn't it a
21 fact that under the Federal Order system, if protein
22 levels have gone up by 10%, that is reflected in the
23 Class II, III, and IV price, but it's not reflected in the
24 Class I price?

25 A. Right. Yeah, because the USDA is using standard
26 components to establish that Class I pricing base price.

27 Q. And so, in effect, it isn't correct in the real
28 world that the Class I price reflects the extra value of



1 protein, correct?

2 A. Hence, Proposal 1 and 2.

3 Q. Okay. Well, but I'm --

4 THE COURT: May I interrupt just a minute? Would
5 you give a little more volume to the witness's mic? He's
6 in the right position and everything, but a little more
7 volume.

8 Continue, Mr. Rosenbaum.

9 BY MR. ROSENBAUM:

10 Q. Now, the MPC orders have been in effect at least
11 since sometime in the 1980's I believe.

12 Do you know that?

13 A. I do not know that.

14 Q. Okay. Well, so let me make reference to the
15 establishment of the MPC regime in what was then the Great
16 Basin and Lake Mead marketing areas. And there was a
17 decision January 11, 1988, 53 Federal Register, 686, and
18 there USDA stated, I'll just read you the key paragraph:
19 "There was no evidence that protein content has any effect
20 on the value of fluid milk products at all. On the
21 contrary, there appears to be general agreement that
22 consumers are not willing to pay more for fluid milk with
23 a higher-than-average protein content than they are for
24 low protein milk. Handlers cannot easily remove protein
25 from fluid milk products to add it to products in which it
26 would have value, and it is illegal for them to add water
27 to milk to reduce its protein content. Therefore,
28 handlers attain no discernible difference and economic



1 benefit from the various levels of protein contained in
2 milk used in fluid milk products, and there is no
3 justification for requiring them to pay for such milk
4 according to the protein content."

5 Now, that's a statement that was made at the very
6 time that USDA was, by imposing multiple component
7 pricing, going to be raising the Class II, III, and IV
8 minimum prices based upon protein level and other things,
9 correct?

10 A. I haven't read that, but I'll take your word for
11 it.

12 Q. Well, that's what MPC --

13 A. MPC is standing for?

14 Q. Yeah, okay. Multiple --

15 A. Not Milk Producers Council.

16 Q. Yes. Yes. That's what multiple component pricing
17 is, correct?

18 A. Correct.

19 Q. Okay. So I mean, is it -- this is 1988. I mean,
20 is it fair to say that for decades there, in fact, has
21 been and was understood by USDA that there was going to be
22 a disconnect between the pricing of Class I milk and the
23 pricing of manufactured milk insofar as manufactured milk
24 prices were enhanced by higher protein levels?

25 A. Well, Mr. Rosenbaum, that's a very interesting
26 Federal Order hearing that you brought up, because just so
27 happens that's the one Federal Order that got voted out by
28 producers.



1 Q. Surely not on that ground.

2 A. Well, they weren't happy with the way things were
3 going, and they voted it out.

4 Q. I mean, most Federal Orders have adopted multiple
5 component pricing?

6 A. Well, that's the one you chose to bring to my
7 attention.

8 Q. Well, okay. Do you have any basis to believe that
9 it is that aspect of the Federal Order system that led to
10 that order being depooled?

11 A. Well, they were very unhappy with the way the
12 whole system was working, including Class I price levels
13 and their ability to get it and all kinds of things. But
14 it certainly didn't help.

15 Q. That's all I have.

16 MR. ROSENBAUM: Thank you.

17 CROSS-EXAMINATION

18 BY MR. MILTNER:

19 Q. Good morning, Mr. Vanden Heuvel.

20 A. Good morning, Ryan.

21 Q. I'm Ryan Miltner. I represent Select Milk
22 Producers.

23 So I wanted to talk specifically about your
24 comments on Select's three proposals.

25 Before I do that, you mention that MPC is a
26 producer trade association. Are the members of MPC also
27 members of California's cooperatives?

28 A. Oh, yes.



1 Q. Are there any independent producers that are
2 members of MPC?

3 A. There are some.

4 Q. The majority would be cooperative shippers,
5 though?

6 A. Yeah. A majority of producers in California
7 belong to cooperatives, so that's reflected in our
8 membership.

9 Q. And of the cooperatives that operate in
10 California, the three primary cooperatives are DFA, Land
11 O'Lakes, and CDI, correct?

12 A. California Dairies, yes.

13 Q. Are there any other cooperative -- cooperatives,
14 who have members that are also members of MPC, to your
15 knowledge?

16 A. Well, depends on -- you know, there's -- there's a
17 variety of, you know, paper cooperatives or cooperatives
18 that exist, so, you know, we have some of those as
19 members. But the vast bulk of our membership is a member
20 in one of those three cooperatives.

21 Q. And those three cooperatives are also members of
22 National Milk Producers Federation, correct?

23 A. Correct.

24 Q. And so those cooperatives had input into the
25 National Milk process in developing their slate of
26 proposals as you understand it?

27 A. I understand that to be the case.

28 Q. Do you know if any MPC members were part of the



1 working groups that were committees within National Milk
2 who helped to develop the National Milk slate of
3 proposals?

4 A. I am unaware of that.

5 Q. You have made brief comments on Proposals 10, 11,
6 and 12, which are those offered by Select.

7 Would it be fair if I tried to characterize your
8 positions as supportive with respect to the goals of those
9 proposals, but not supportive of making changes in this
10 proceeding?

11 A. That's a fair characterization of our position.

12 Q. And I think with respect to Proposals 11 and 12,
13 you -- you state that MPC would be open to considering
14 those issues at a future hearing; is that correct?

15 A. Yes.

16 Q. You also note it's been 16 years since -- or so --
17 since USDA's last addressed price formulas.

18 A. Yes.

19 Q. I'm wondering why your board thinks these issues
20 are worth addressing, but they are willing to wait some
21 indeterminable period of time to look at them again,
22 especially given that it's been a decade and a half since
23 we last did so?

24 A. That's a fair question. You know, this -- this
25 kind of mother of all hearings has been anticipated for
26 many years, clearly with labor and energy rates going up
27 pretty dramatically, inflation, so we understand there's
28 pressure to get something done.



1 This is relatively new in terms of, you know, how
2 do you make adjustments, and so we really view this
3 hearing as kind of a -- the first of making a more regular
4 type adjustment regime as Federal Orders go forward, so we
5 think there will probably be opportunities in the future.

6 These formulas were adopted, you identified in
7 Proposal 12 -- it was interesting going back and reading
8 the record that that would have bounced around a bunch in,
9 you know, 2000 -- 1999, '98, '99, 2000, 2001, 2002. They
10 settled on something. I think you have identified that
11 there's significant room for improvement in the way we
12 handle nonfat solids in the Class IV.

13 But by the time your proposal emerged, National
14 Milk had really brought the whole producer side of the
15 industry together on a slate of proposals that we felt
16 really addressed the main issues in a fair and equitable
17 fashion, and even though there's a lot of validity to the
18 buttermilk powder solids in Class IV being more explicitly
19 considered, it does have a pretty big impact on a
20 relatively -- you know, on the balance that National Milk
21 sought to -- sought to bring about.

22 And so, yeah, we had a robust discussion on our
23 board and decided that we wanted to stick with the
24 National Milk approach, but make it clear that we think
25 that there's a lot of validity to what has been raised
26 here by Select in Proposal 12 in particular.

27 Q. And if I can attempt to characterize your answer,
28 or summarize it perhaps. Your board's position is that



1 National Milk, who put a lot of time and effort into
2 developing a slate of proposals around which they were
3 able to achieve a consensus of their numbers, is the
4 extent of what your board is willing to consider in terms
5 of adjustments in this proceeding?

6 A. I didn't hear the question.

7 Q. Is it your board's position that anything other
8 than what National Milk built consensus around is not open
9 for their support?

10 A. It's open for their consideration, and we did.
11 And, you know, you have -- this is art and not science.
12 And the art was that that was a -- that was a solid and
13 fair approach, and so that was where we came down in terms
14 of our formal support.

15 Q. Now, I want to ask a little bit about Proposal 10,
16 which is butterfat retention.

17 A. Uh-huh.

18 Q. You mentioned that you testified as a witness on
19 behalf of Select as well as other groups, and one of those
20 groups was a trade association, and MPC was a member of
21 that trade association.

22 A. That's correct.

23 Q. So it was perhaps even a -- you were there on --
24 in some respects on behalf of MPC?

25 A. Correct. Recognizing we were not going to be
26 subjected to the findings because we were in a state
27 order.

28 Q. And you testified at that point in support of



1 butterfat retention at 94%, correct?

2 A. There was a 94 number in there, but I'm not sure.
3 I think it's very complicated, and it gets -- you have --
4 I don't think that we were testifying to 94. We were --
5 there was a 94 in the testimony, but I'm not sure it
6 specifically related to the butterfat recovery.

7 Q. At that time, I think the testimony you offered
8 did argue that at that time plants were achieving higher
9 than 90% butterfat recovery?

10 A. Yes. Yes. But the question is, is on the
11 butterfat that's not captured in the cheese, how do you
12 value that?

13 And the way that California Class 4b formula
14 valued it was explicit. They actually added a value for
15 whey fat. And in that explicit value, they had basically
16 deducted from that value -- they actually tracked it
17 separately, and it was tied to a discount off the AA
18 butter, and there was a manufacturing -- an implied
19 manufacturing cost to convert it. And so that's the way
20 the California 4b formula did it.

21 The proposed Federal Order Class III formula was
22 much more opaque, if I could pick a word. And so the 94
23 as opposed to 100 was to account for the fact that, you
24 know, it's not pure AA fat or -- okay? And so there --
25 and so it was less than 100 to recognize that there was --
26 that there was some degrading of that fat, and so that was
27 where the 94 came from. USDA in -- you know, in the final
28 analysis essentially gave it a full value.



1 And so it's had some rather interesting
2 ramifications as it's rolled through the various fat
3 levels. You know, when butter's \$1 as opposed to \$3, it
4 has a huge impact on Class III prices. I call it a
5 "quirk." The industry doesn't seem too worried about it.
6 I have written a little bit about it, drawn a little bit
7 of attention to it. No one wanted to take it up in this
8 hearing. It's not part of anything that we're doing
9 today.

10 But the fact of the matter is, is that even though
11 90% of the fat in the formula ends up in the cheese, the
12 other 10% is valued at the Class IV price.

13 Q. Do you believe that not more than 90% of the
14 butterfat delivered to a Class III cheese plant ends up in
15 the cheese?

16 A. That depends on what kind of cheese you are
17 making.

18 Q. Your characterization of butter being valued at
19 100% value, that's your characterization, correct?

20 A. That's mine.

21 Q. And your previous testimony offered in -- around
22 the turn of the century --

23 A. Back when we were both younger, Ryan.

24 Q. We were all younger then, Geoff.

25 Your -- the 94 figure, 94% figure that you
26 referenced, was, in fact, done in part to recognize the
27 value of whey cream, correct?

28 A. Yes.



1 Q. But you also included a separate adjustment for
2 whey cream in that testimony, didn't you?

3 A. Boy, I -- I don't recall that we had a separate
4 one. Was there? I don't know. I re-read it, but I
5 didn't -- I didn't call -- I certainly don't remember it
6 originally.

7 Q. Do you -- do you -- did you -- in preparation for
8 your testimony, did you review USDA's decision from that
9 hearing or just your testimony?

10 A. I read some decisions. I'm not sure if I read
11 that one. I re-read my testimony.

12 Q. Do you recall in 2007, the last time USDA took up
13 the formulas, that there was a proposal to adjust the
14 value of whey cream?

15 A. I did not follow or participate in that hearing.
16 Probably should have.

17 Q. Would it surprise you if USDA's decision in that
18 hearing stated that there's no publicly-available data to
19 determine if or how whey cream is distorting the protein
20 price formula?

21 A. Yeah. I have got no response to that.

22 Q. Okay. Would the -- does the MPC board support
23 addressing or looking at the three issues covered by
24 Select's proposals as part of another hearing or as part
25 of a mandatory survey on yields and other factors?

26 A. Well, I don't think those are mutually exclusive.
27 I think there needs to be -- you know, clearly we're
28 supportive of Congress giving USDA the authority to do



1 mandatory surveys. We're very interested in being
2 involved in -- in lots of transparency in that survey as
3 it's developed, and hopefully out of that comes yields and
4 a whole lot more information about this topic.

5 I think that the industry probably needs to have
6 some discussions about, you know, if we're going to go
7 tackle the mechanics of these formulas, that should be
8 done. There should be a lot of prep work ahead of time.

9 Q. And I didn't mean to present my question as if
10 those were mutually exclusive, so let just me rephrase it.

11 Does MPC support addressing these issues in some
12 other forum or another time, whether that be through a
13 survey, or through a hearing, or some other mechanism?

14 A. Well, certainly on the buttermilk, the buttermilk
15 solids, definitely. On the other two, you know, we're
16 willing to participate, but others are going to have to
17 drive that.

18 Q. Understood.

19 A. Thanks, Ryan.

20 CROSS-EXAMINATION

21 BY MR. LAMERS:

22 Q. Mark Lamers, Lamers Dairy.

23 Good morning, Mr. Vanden Heuvel. Forgive me if I
24 mispronounce your name. I have relatives that pronounce
25 it "Vandenheuvel."

26 A. Oh, that will work, too.

27 Q. Just a couple of questions in regard to the
28 higher-of.



1 Are you familiar with the Marketing Agreement Act
2 of 1937?

3 A. Generally.

4 Q. Okay. And without reading through this particular
5 section all of the way, we're talking about classified
6 pricing. There's a sentence in there that says that milk
7 is to be priced at the highest use classification. Okay?

8 In orders where there's a California -- Order 30,
9 they have a high Class III price -- I'm sorry -- a high
10 Class III utilization.

11 Wouldn't it make sense to continue looking at
12 using the higher-of as it is today given the volatility in
13 the III and the IV markets to satisfy the requirement of
14 the Act and considering the highest use classification?

15 A. I don't -- I don't -- I don't see the connection
16 at all, Mr. Lamers.

17 Q. Well, isn't Class III generally a higher use than
18 Class IV?

19 A. Certainly not universally in the country. Maybe
20 in Order 30, but it's not in California.

21 Q. Okay. Let's talk about Order 30 then. Doesn't it
22 make sense in Order 30 that that should be considered when
23 looking at the Class I mover?

24 A. Well, you know, when it comes to considering, I
25 think USDA needs to consider everything. That's why these
26 hearings take so long is there's a lot for them to
27 consider. The question is where they come out. And they
28 have to balance the interests. And price alignment and



1 making sure that Class I prices are the highest price in
2 the order is a very important consideration. It needs to
3 be given great weight.

4 Q. But back to what Mr. English was talking about, I
5 believe earlier, was the amount of milk in the country
6 that was Class I mostly fluid back in the early days,
7 earlier days versus today, is greatly different; is that
8 correct?

9 A. It is correct.

10 Q. Okay. And in the Act when this was proposed, it
11 was the highest use, fluid milk was the highest use at
12 that time?

13 A. That may be a historical fact.

14 Q. And in some orders, that's not the case today.

15 So if the -- say the general counsel and the AMS
16 and USDA look at the language of the AMA, are they not
17 obligated to take into consideration the uses of that milk
18 in which class it is used?

19 A. I suppose that they are. But are you suggesting
20 that the -- that for 19 years the operation of Federal
21 Order was in violation of the AMA?

22 Q. I'm not an attorney, but I would probably say yes.

23 A. Well, have at it.

24 Q. Now, when the price relationships are pretty close
25 between the Class III and IV under the current system
26 right now, would the producers actually come out ahead
27 versus the higher-of in those months?

28 A. They may come out higher ahead, and if you are



1 saying higher ahead is a higher price.

2 But I want to make it very clear: Milk Producers
3 Council and myself believe that the Federal Order system
4 is incredibly valuable to producers and that the integrity
5 of that system needs to be defended, and even if you could
6 get a higher price occasionally in some other arrangement.
7 The idea that that Class I price needs to be the highest
8 most of the time, and designed to be the highest in
9 realtime, is critical to the success of the Federal Order
10 program.

11 And the big fear that we have with this average-of
12 plus 74, and the way it's just distorted those
13 relationships, is the damage that it does to the long-term
14 viability and the integrity of the Federal Order system.

15 Q. Throughout this hearing there has been a lot of
16 testimony and evidence showing the decline of Class I
17 sales throughout the country.

18 Would you agree with that?

19 A. I agree that Class I sales are declining as a
20 percentage.

21 Q. So in all of National Milk's proposals, to me it
22 seems that they are trying to extract as much money as
23 possible from the Class I consumer.

24 A. Does that surprise you?

25 Q. But is it necessary?

26 A. I think price enhancement has always been part of
27 the Class I pricing. It's always been a consideration.

28 Q. But to the extent that the money is paid from that



1 Class I shrinking market, what's the justifications for
2 increasing it to the levels that are proposed?

3 A. I think that you will hear lots of testimony, and
4 have already, why.

5 Q. Okay.

6 MR. LAMERS: Thanks, Mr. Vanden Heuvel. I have no
7 more questions.

8 THE WITNESS: Thank you, Mr. Lamers. It's nice to
9 put a face with a sound.

10 CROSS-EXAMINATION

11 BY DR. CRYAN:

12 Q. I'm Roger Cryan with the American Farm Bureau
13 Federation. Thank you.

14 Mr. Vanden Heuvel, are you now, or have you ever
15 been, a member of the Farm Bureau?

16 A. A proud member of the San Bernardino County Farm
17 Bureau, and now the Tulare County Farm Bureau.

18 Q. Wonderful. Thank you. And I appreciate your
19 service on the AFBF dairy working group.

20 A. And it was a privilege.

21 Q. You indicate that you believe that adding
22 640-pound blocks to the survey is a complication.

23 How does that -- how is that a complication?

24 A. Well, you know, it -- there again, there's a
25 judgment call that needs to be made. And the 40-pound
26 block cheddar seems to be the benchmark. I have listened
27 to lots of testimony in this hearing about that. And 640s
28 apparently are priced off of the 40-pound blocks, so it



1 seems a bit redundant.

2 You know, and I mean, you could -- if barrels stay
3 in, then adding 640s would be a good idea. But our
4 position, National Milk's position, is take the barrels
5 out, which I think would be very -- that's more
6 imperative, so --

7 Q. Okay. So if the barrels stay in, you would
8 have -- you would support --

9 A. Well, if the barrels stay in, then we got to do
10 something to reduce their impact, because their impact is
11 incredibly damaging to producers.

12 Q. Okay. Thank you. That's a significant caveat.

13 And when it comes to setting Make Allowances,
14 what's your -- what's your sense of what share of
15 processors or what share of volume in the country should
16 have their costs covered by -- by a Make Allowance?

17 I mean, the survey data -- survey of data -- I'm
18 sorry -- a survey of processing costs would presumably
19 generate sort of a range of costs. And what's your sense,
20 should every processor have their costs covered? Should
21 half or -- if I remember correctly, it's -- maybe even
22 California took the attitude that 75% of volume should
23 have their costs covered. What is your thought on how
24 that should be approached?

25 A. Well, okay. So it's interesting to hear in your
26 question that you assume that California is at 75, because
27 they never, ever picked a number.

28 Back in -- back in the early '80s when we had huge



1 plant capacity issues, they -- they essentially said -- I
2 think they said, we need every plant, so we'll take the
3 least efficient one, give them a Make Allowance that will
4 cover the least efficient plant, and that's what it will
5 be.

6 So it's like, almost 100% of -- you know, part of
7 the -- embedded in that was an incentive to go build more
8 plants. And -- but at that time, the -- the -- we only
9 had -- milk for cheese and milk for butter powder was all
10 priced based on Class IV. We only had a Class IV. And
11 then they split it into 4a and 4b. They -- they had the
12 mechanism to have 4a and 4b in the law, but 4b was the
13 same as 4a up until 1988 when they finally emerged -- the
14 cheese industry emerged. And so it was -- it was a butter
15 powder Make Allowance that was being applied to cheese
16 plants.

17 So California, I think it's -- they moved that
18 Make Allowance constantly all over, and they never ever
19 committed themselves to a particular level.

20 You know, average costs -- I think you heard in my
21 testimony, I'm a little concerned about all the weight
22 that's being put on this audited study, like somehow or
23 another that's going to then dictate what we do.

24 Partly -- you know, one of the things about the California
25 hearing process was it had all the trappings of a judicial
26 type -- you know, there was a hearing officer. It was a
27 Department -- California Department of Food and Ag that
28 was a panel. Witnesses got up, they got sworn in. The



1 Department issued a whole bunch of factual information
2 into the hearing record at the beginning. No witnesses
3 were subject to cross-examination. You couldn't -- except
4 from the panel, but no one -- they could get those
5 hearings over in a day.

6 But the record was really, really broad, and they
7 could pick whatever -- whatever they wanted. And we never
8 had an opportunity -- I tried once, because the one
9 witness that could be cross-examined was the Department's
10 witness. And I tried to get -- I tried to discern from
11 that Department witness when they entered in the
12 manufacturing cost studies into the record, how they
13 allocated costs inside that study, and I never got
14 anywhere.

15 So, you know, there was a big mystery about -- we
16 just trust that they did it right. And maybe they did. I
17 mean, I really don't know. We never really probed it.

18 This time around, you know, the stakes are big,
19 and when we get an audited study, there needs to be a lot
20 more transparency. You know, the industry really needs to
21 dig in. And I think that we're going to be somewhat
22 frustrated, because these plants are all different.

23 And that's why I think, you know, Mr. Rosenbaum
24 asked me about this comparison of all-milk to mailbox.
25 Ultimately, a plant over time can't pay more for milk than
26 what they are getting out of the market, and that's going
27 to be reflected over time in that mailbox price. And the
28 all-milk is a pretty good reflection of the regulated



1 price.

2 But when you see that gap widening, you know these
3 plants are not able to recover that regulated price out of
4 their product. That's a pretty good context to help guide
5 us as we get all of the other -- you know, hopefully we'll
6 massively improve the data that we have.

7 But, yeah, you're not going to get me to say that
8 there's some magic number out of that survey that we ought
9 to cover.

10 Q. Okay. Thank you.

11 You talked about how important it is to have the
12 Class I price as the higher and -- but you were concerned
13 that eliminating advanced pricing is radical, and that you
14 indicate that hedging tools should react to the Federal
15 Milk Marketing Order rules, not dictate those rules.

16 Are we not sort of letting the hedging tools
17 dictate the Federal Order rules when we say that if
18 there's no futures contract for Class I, we can't
19 eliminate the advanced pricing?

20 A. Well, you know, I heard all that -- that
21 discussion. I spent days on that. And the fact of the
22 matter is, is that, you know, the way this system works is
23 that the Class I handlers that have to be regulated, that
24 have to be in, they -- you know, what makes that tolerable
25 for them? Well, they know what the price is ahead of
26 time, and they know all their competition is paying that
27 price. Equal raw product cost is just huge to the fluid
28 handlers.



1 And, you know, when I heard that -- you know, all
2 this, you know, we got to accommodate hedging, it's like,
3 well, you are going to require hedging. I mean, if these
4 guys don't know what their price is ahead of time, and
5 they are open and exposed, then they got to hedge. Well,
6 then you've begun to dramatically undermine the integrity
7 of this whole system.

8 And, hey, I think the hedging tools that are
9 available are great. You know, the programs that have
10 come out from, you know, Risk Management Agency, DRP, and
11 so on, they are all wonderful. But the entity that keeps
12 this big ship that is the U.S. dairy industry moving in a
13 positive direction is undergirded with the foundation of
14 the Federal Order program. It's a marvelous thing, and we
15 need to be very, very careful about messing with it. And
16 that messes with it.

17 Q. But the return to the higher-of, that -- that --
18 that would seem to call for new hedging tools?

19 A. If the market -- if people want them, they will
20 get them. There's plenty of market makers out there
21 apparently who are willing to do stuff.

22 Q. Right. And if those tools exist, then advanced
23 pricing is facilitated?

24 A. Well, for those that -- that matter, I mean, you
25 know. It's -- it's -- I don't want to go -- I don't want
26 to get down that road. I think I've made my point clear.

27 Q. Okay. Thank you.

28 And to be clear, Milk Producers Council supports



1 Proposal 21 to raise the Class II differential?

2 A. Yeah, we think we made some points. I guess you
3 got some more to make in cross. Thank you, Roger, for
4 letting me go ahead of you.

5 Q. Very good. You're very welcome.

6 DR. CRYAN: Thanks. That's all. Thank you.

7 THE COURT: Would anyone else like to
8 cross-examine the witness before I turn to the
9 Agricultural Marketing Service?

10 I see no one. And I invite the Agricultural
11 Marketing Service's questions.

12 CROSS-EXAMINATION

13 BY MS. TAYLOR:

14 Q. Good morning.

15 A. Good morning.

16 Q. Thank you for making the trip out here.

17 A. My pleasure.

18 Q. MPC, you talked with, I think, Mr. Miltner about
19 members being mostly cooperative.

20 About how many members does the organization have?

21 A. We have got a little over 100 members, but they
22 are fairly large.

23 Q. I'm going to try not to be repetitive. I want to
24 start on your support of eliminating barrels from the
25 formula. And you say you believe it's your best option.
26 You believe it's the best option.

27 I was wondering if you could just expand on why
28 you think that is?



1 A. Well, you know, Class III applies to all cheese
2 makers, all cheese, you know, people who are buying milk
3 for cheese, and, you know, a lot of that is mozzarella.
4 And, you know, listening to the testimony, which is very
5 consistent with our understanding -- and we're not in the
6 cheese business -- but our understanding is that the vast
7 majority -- I heard numbers, you know, well over 95% of
8 the cheese that's sold is indexed in some way to that
9 40-pound block.

10 And clearly barrels have much more than a 5%
11 impact on the Class III. They -- they began behaving in
12 very different fashion than what we -- what they had
13 historically when it was put in in 2000, and it's very
14 distorted. There are these kind of gaps between --
15 between a 40-pound block and 500-pound barrels are, you
16 know, just completely inexplicable, as I listened very
17 carefully to your witnesses -- the witnesses here that
18 could shed some light on that. I thought Mr. Bauer was
19 incredibly persuasive.

20 Q. And so I was wondering if you could comment on
21 your thoughts then about the impact of barrel cheese
22 makers. We did have a few barrel makers testify about
23 dropping barrels from the formulas and how they didn't
24 think that was a good idea, other than Mr. Bauer, who
25 supports it. And I was just wondering if you could talk
26 about what your thoughts are in response to their
27 comments.

28 A. Yeah. Well, I mean, everybody reacts and adjusts



1 to the rules, and the rules don't change very much.
2 That's -- that's really the benefit -- you know, a benefit
3 of not having hearings very often. And business, if it
4 knows the rules, will adjust -- can adjust and will
5 adjust.

6 And the barrel -- clearly the barrel folks, if
7 USDA no longer considers the barrels as part of the
8 Class III formula, that may change the way they have to
9 price their barrels. But there -- a particular barrel
10 manufacturer, it isn't like one barrel manufacturer would
11 be treated different than another. The whole industry
12 would have a rule change, it would be announced, they
13 would know it, and they'd have to adjust accordingly.

14 Q. On your manufacturing allowance testimony, on
15 page 5 you talk about, in that first paragraph, about --
16 you talk in the middle -- you talk about the "totality of
17 the manufacturing enterprise." And the sentence, it
18 talked about setting -- "the formula would miss out on
19 evaluating the totality of the manufacturing enterprise."

20 And I was just wondering if you could expand on
21 what you're talking about there. What does that mean?

22 A. Well, remember what this is -- this is a
23 replacement for. A product value system is a replacement
24 for a direct survey of what plants pay for milk in the
25 Minnesota-Wisconsin area.

26 Those plants that paid for -- that were reporting
27 during the MW price series, were reporting what they paid
28 for milk based on the totality of their operation, because



1 they had to compete for a milk supply. They had --
2 however way they utilized that milk, whatever revenues
3 they were able to derive from that milk, and this is what
4 they paid.

5 The challenge you have when you go to a product
6 value is you pick out a few discrete products, and you
7 pick them out for very good reasons, because they are
8 consistent. They are big enough that you get a price
9 series and -- and well enough known costs, but you miss
10 out on the competitive nature.

11 And I thought -- you know, I referred to
12 Mr. Brown's testimony, there are no plants that make
13 exclusively NDPSR products apparently, according to
14 Mr. Brown, and he is definitely an authority on this. So
15 everybody's got something that enables them to survive and
16 to make money, and you can't just capture that if all you
17 are looking at is just that particular product.

18 And then you secondarily have the problem of if
19 you are an accountant and you go in there, how do you
20 actually allocate costs to that particular product? And,
21 you know, it's very challenging to do that. And you can
22 do it, but that's -- that's what I meant by that.

23 Q. And so -- and I think that then leads into what
24 you are talking about how it's useful to have all these
25 datasets. But your belief is that still there's some -- I
26 don't know what the right word is -- but we'll say wiggle
27 room for the Department to have some determination on
28 where to set those, and in your opinion, it doesn't



1 necessarily need to be at a specific number or a specific
2 average or anything --

3 A. Nope.

4 Q. -- that's contained. Okay.

5 THE COURT: Elaborate, though, when you're nodding
6 your head yes as she spoke.

7 THE WITNESS: Yes. No. Hey, in some ways you
8 have to play Solomon. There's wisdom and judgment. And
9 what I appreciate about this process is all of us get to
10 come in here and, you know, load you up with perspective,
11 and then you have got to actually come out with something
12 that's defensible and based on the record.

13 BY MS. TAYLOR:

14 Q. I wanted to take a few minutes on your chart on
15 page 6, because I want to make sure that we understand
16 exactly what you wanted to show us, so when we go back, we
17 can evaluate it.

18 So when I'm looking at this chart on page 6, I see
19 the red line, I think you said was the moving average.

20 And that's the mailbox price; is that correct?

21 A. That's the difference.

22 Q. Okay. So can you explain, go through it one more
23 time?

24 A. Sure.

25 Q. Yeah, that would be helpful.

26 A. Okay. So the mailbox is the constant at the
27 dollar sign. The blue line is the difference between the
28 all-milk and the mailbox. So the mailbox is constant, and



1 the all-milk moves up and down relative to the mailbox,
2 and so this is charting the differences. And then the red
3 line is just the moving 12-month average of the
4 differences.

5 Q. The rolling average?

6 A. Correct.

7 Q. Okay.

8 THE COURT: While we're looking at that, would you
9 expand on some of the comments that would make it appear
10 that the increase -- that what appears to be an increase
11 in the valuation of the milk might have been from other
12 factors such as whether the milk was pooled, or whether
13 Grade A went to the Grade B, or whatever other factors
14 might have been involved?

15 THE WITNESS: Okay. Certainly there -- there
16 are -- you know, we know that freight's gone up, so there
17 would be a larger freight deduction. Okay? So that's
18 going to play a role in some of this increase.

19 But another big one could be the inability of the
20 plants to be able to pay the full -- somehow or another
21 the money isn't getting -- less money is getting to the
22 producers, because the gap between the regulated price and
23 what the producer receives, which used to be narrow, is
24 now widening. So producers are not receiving -- they are
25 receiving much less than the regulated price, and that's
26 an indicator that the plant, you know, somehow or another
27 there's an inability to get money to the producers.

28 Now, that -- what informs that on the cooperative



1 side is reblends and assessments that they are charging to
2 their members, because their manufacturing operations are
3 no longer as profitable as they once were. And that
4 reblend is coming into this relationship, so that's part
5 of it. How much of it is? We don't know. But it does
6 tell you that something changed in here, in this
7 relationship.

8 Because this was a relatively stable relationship.
9 It got narrower after the 2008 Make Allowance change. It
10 shrunk a bit, and then it began to increase. And so it's
11 not a definitive, but it helps set the parameters and the
12 context for all of the other testimony that comes into
13 this hearing.

14 MS. TAYLOR: And so if I could follow up on that,
15 because the judge was leading to my next set of questions,
16 which I do appreciate.

17 THE COURT: I'm so proud.

18 BY MS. TAYLOR:

19 Q. So when we see on this chart the difference rise
20 in positive, so the all-milk is getting a bigger variance
21 between the mailbox --

22 A. Right.

23 Q. -- and that's what you are talking about?

24 A. Right.

25 Q. But that variance means that the producers are
26 actually getting that much less than --

27 A. Correct.

28 Q. -- whatever the all-milk price is?



1 A. Correct.

2 Q. And so this seems to be -- we heard similar
3 testimony comparing the mailbox prices and blends showing
4 that that negative difference is indicating that
5 manufacturing allowances are not adequate.

6 A. It certainly can point in that direction.

7 Q. Okay.

8 A. And -- right. So the reason for this chart, and
9 bringing this to your attention is, to put some parameters
10 around it. Because you can see, you know, it -- it seems
11 like we're, you know, \$0.75 difference in that range when
12 you take out the pandemic spike, not \$1.50.

13 Q. Okay. That leads me to my next set.

14 So later down on page 5 you talk about how
15 National Milk is proposing a \$0.55 adjustment for both
16 Class III and IV.

17 My first question, just to make sure it's clear on
18 the record, that's a per hundredweight adjustment that you
19 kind of --

20 A. Yes.

21 Q. -- use the formulas and put those factors
22 together --

23 A. Correct.

24 Q. -- okay, of what they proposed?

25 And then feeding into your graph on page 6, then,
26 in your opinion, that \$0.55 is kind of around the average
27 difference, and so that would be --

28 A. Yes.



1 Q. -- that's appropriate, or the data indicates --

2 A. Correct.

3 Q. -- in your opinion --

4 A. Yes.

5 Q. -- is appropriate?

6 A. Yes.

7 Q. Okay. And so you also say in the data, prior to
8 2008, when we had the first adjustment, because that
9 difference was also positive, it indicated the need to be
10 an adjustment.

11 And when you saw the difference hover around zero
12 from that green line to somewhere in 2015, that indicated
13 to you that the manufacturing allowances seemed to be
14 adequate during that period?

15 A. Yes.

16 Q. Okay. So later on you talk about, in relation to
17 Proposals 8 and 9, you say, "The magnitude of change
18 contained in these proposals is way too large."

19 And are you talking about as you compare them to
20 the current levels?

21 A. And compared to National Milk's proposal.

22 Q. Okay. And so do you have an opinion on those
23 proposals -- you know, this is kind of like a phase-in
24 approach over four years. Do you have an opinion on any
25 of those particular years or are you talking about the end
26 result, which is year four?

27 A. Well, the end result is certainly unacceptable.

28 In terms of phasing it, you know, that doesn't



1 make an undesirable result any better.

2 And you have heard my skepticism or cautions,
3 about, you know, the usefulness. It is useful, an audited
4 survey, but there's -- that is -- that definitely cannot
5 be the be all, end all of telling us where Make Allowances
6 ought to be.

7 And, frankly, Wisconsin Cheese Makers and IDFA
8 took Stephenson's and Bill Schiek's work and engineered a
9 very substantial manufacturing allowance and said that
10 they are just following the study. And I don't blame
11 them, but that's not the right approach.

12 Q. Do you have any comments on Dr. Schiek's study
13 since that is California specific?

14 A. Well, it starts with a baseline of California
15 specific. But you heard -- you heard what I think of the
16 California surveys. So, you know, the fact that he
17 engineered it is an interesting engineering approach. It
18 should be taken into consideration, but it's certainly not
19 determinative.

20 Q. I want to move on to the Class I mover proposals.

21 At the top of page 8, the last sentence there on
22 that first paragraph when you are talking about -- you see
23 Proposals 14 and 15 as "undermining the ability to
24 correctly discover the market value of milk and then
25 translate that value into a properly aligned Class I price
26 in the realtime."

27 Just wondering if you can just expand on that
28 thought.



1 A. Yeah. I mean, you know, these decisions on
2 whether to pool or not pool are made in realtime, and the
3 Class I price needs to incentivize folks to affiliate with
4 the pool in realtime, and the Class I price needs to be
5 designed to be in the right place at the right time. And
6 these kind of catchups, you know -- I -- I get it. My
7 fellow producers, I still think of myself as a producer, I
8 mean, we're always -- you know, tended to think about, you
9 know, how much will that affect the milk price? I -- I am
10 not immune to that, but I'm more thinking about the value
11 of the system. And it's really important that the system
12 be properly designed if it's going to have another
13 85 years.

14 And we made a big mistake when we gave up on
15 higher-of. We didn't have a hearing or we probably would
16 have smoked it out. Congress, it sounded like a good
17 idea, there were some other things going on at that time
18 that I understand why it happened. Fortunately, I mean,
19 Congress only put it in place for two years and then gave
20 USDA the discretion to change it after that. We tried it
21 out. It didn't work. It's undermining the integrity of
22 the system, and it needs to change as quickly as possible.

23 Q. So you are opposed to any type of adjuster,
24 whether it's static --

25 A. Absolutely.

26 Q. -- rolling, set for a year --

27 A. Yeah, that's just -- that's just putting lipstick
28 on a pig.



1 THE COURT: That's what?

2 THE WITNESS: Putting lipstick on a pig.

3 MS. TAYLOR: Okay. And with that comment, I think
4 AMS is done.

5 THE COURT: Mr. Lamers?

6 MR. LAMERS: If I may, Your Honor.

7 Mr. Vanden Heuvel caught me off guard with the
8 question whether or not I thought the Federal Order system
9 was illegal.

10 THE COURT: And you would like to --

11 MR. LAMERS: And I want to make it clear, I do not
12 think the Federal Order system is illegal. Okay? I'm not
13 saying that.

14 But I am saying regarding the language in the
15 order pertaining to the highest use, is that I feel like
16 somewhere along the line that portion of the language got
17 lost. So it was not to say -- and I apologize to
18 everybody in this room, to make it seem like if I thought
19 this whole process was illegal and a sham. I don't mean
20 that.

21 That's all I have. Thank you.

22 THE COURT: Thank you, Mr. Lamers.

23 Are there any other questions at all for this
24 witness?

25 There are none. Thank you so much.

26 THE WITNESS: Good seeing you again, Judge
27 Clifton.

28 THE COURT: Thank you. And you may step down.



1 MS. TAYLOR: Can we move his exhibit into
2 evidence?

3 THE COURT: Thank you. Yes, indeed.

4 Is there any objection to the admission into
5 evidence of Exhibit 385?

6 There is none. Exhibit 385 is admitted into
7 evidence.

8 (Thereafter, Exhibit Number 385 was received
9 into evidence.)

10 THE COURT: Now, Dr. Cryan is next. It's about
11 10:30. Let's take a five-minute stretch break. Please be
12 back ready to go at 10:35.

13 (Whereupon, a break was taken.)

14 THE COURT: Let's go back on record.

15 We're back on record. It's 10:37.

16 Mr. English, do you now come back to continue your
17 cross-examination?

18 MR. ENGLISH: With your permission, Your Honor,
19 yes.

20 THE COURT: Good. You may.

21 MR. ENGLISH: Good morning, again, Your Honor.
22 And good morning again, Dr. Cryan.

23 THE WITNESS: Good morning, Mr. English.

24 ROGER CRYAN,

25 Having been previously sworn, was examined
26 and testified as follows:

27 CROSS-EXAMINATION

28 BY MR. ENGLISH:



1 Q. So when we left off yesterday evening, I had
2 completed my examination with respect to Class II --

3 THE COURT: A little more volume for the
4 questioner.

5 BY MR. ENGLISH:

6 Q. I had finished my examination with respect to
7 Class II, and so now I would like to focus our attention
8 on Class I differential, not exclusively Proposal 20, and
9 to some extent your conversation about 19, but a fair bit
10 of that is about MIG's Proposal 20.

11 And similar to my questions about Class II
12 yesterday, regardless of what association members might
13 have with Prairie Farms, American Farm Bureau does not own
14 or operate any Class I plants, correct?

15 A. That is correct.

16 Q. And do you agree that Federal Milk Order prices
17 are designed to be minimum prices?

18 A. Yes.

19 Q. What is the importance of the idea that Federal
20 Orders are designed to be minimum prices?

21 A. I'm not sure I understand what your question is.

22 Q. Well, you sort of hesitated when I asked the
23 question about Federal Orders are designed to be minimum
24 prices.

25 So now I'm wondering with minimum prices, does
26 that mean that there is necessarily the concept that
27 market prices will be higher than the minimum price?

28 A. Not necessarily. There are four classes of milk,



1 and there are -- the Class I price is the minimum price,
2 and it essentially can enforce minimum price because
3 Class I handlers have to participate in the market.

4 The Class I price is not based on product that --
5 Class I product value minus Make Allowance. It's simply a
6 price that then has to flow through the market to the
7 consumer. The only minimum price in the system that
8 really has to be paid is the Class I minimum price. The
9 minimum prices for the other three classes are subject to
10 depooling, and so they -- they are a tradeoff between
11 paying the minimum price or not participating in the
12 Federal Order system.

13 Q. Is it your view, then, that Class I minimum prices
14 should be set higher than what the market price would be?

15 A. Say that again.

16 Q. Is it your view that the Federal Order minimum
17 prices set for Class I should be higher than what the
18 market would otherwise be?

19 A. They are. The nature of the system is that
20 Class I pays a higher regulated price in order to obtain
21 benefits through the regulatory system.

22 Q. And what is the benefit of participating in the
23 regulatory system for Class I?

24 A. The availability of milk.

25 Q. Do Class I prices actually move milk to Class I
26 plants?

27 A. I believe so.

28 Q. How does that happen when milk -- when the money



1 for Class I is pooled among producers who can voluntarily
2 pool or not?

3 A. The choice -- the opportunity to pool depends on
4 participation -- it depends on association with the
5 Class I handler. If you do not deliver to a Class I
6 handler, you cannot pool any of their milk.

7 Q. Is that really true, sir? I mean, can't you find
8 many other ways without ever delivering a drop of milk to
9 a Class I handler?

10 A. As an individual producer you can, but that's got
11 to be associated with -- you have to be associated with
12 the cooperative or some other organizations delivering to
13 a Class I handler.

14 Q. But the bulk of the milk delivered in this
15 country, whether to Class I handlers or other, is --
16 elsewhere, other manufacturers, is cooperative milk,
17 correct?

18 A. Yes.

19 Q. And cooperative milk, then, as we see with pooling
20 and depooling, or with the Order 30 Class I utilization of
21 6%, very little of that milk is actually delivered to
22 Class I plants, is it?

23 A. The Class I plants are supplied with the milk they
24 need, and the rest of the milk goes to other uses.

25 Q. But Class I handlers often have to pay over-order
26 premiums in order to get the milk, correct?

27 A. I'm not aware that there are a lot of those at the
28 moment.



1 Q. If every one of MIG's members and other IDFA
2 members who appear later in the hearing say they pay
3 over-order premiums, are you saying they are incorrect?

4 A. I'm saying I don't have that information.

5 Q. Actually, I thought your answer was you are not
6 aware that it's happening.

7 A. I'm not aware that it's happening.

8 Q. Let me come back to my question.

9 Does a higher Class I differential paid into a
10 pool, shared across the wide pool, actually move milk to
11 Class I plants?

12 A. It does because it incentivizes producers and
13 cooperatives to participate in the Federal Order pool,
14 which incentivizes them to deliver to a Class I plant in
15 order to associate milk with the pool.

16 Q. Do you know for a fact in an order like Order 30
17 with 6% Class I utilization that there's actually an
18 incentive to move any milk to a Class I plant?

19 A. The system is designed to provide that incentive.

20 Q. Is that the case in Order 30 because the system
21 includes a provision in paragraph 55 for transportation
22 credits?

23 A. I'm not very familiar with the Order 30
24 transportation credit provision.

25 Q. Isn't it a fact that that provision exists
26 precisely because otherwise there is no incentive to move
27 milk to Class I plants in Order 30?

28 A. I'm not very familiar with the transportation



1 credit provision in Order 30.

2 Q. Would you agree with me that if Class I price is
3 set too high relative to the actual value of milk for
4 fluid use, that that will lead to overproduction of milk?

5 A. No. There is no such thing as overproduction in
6 the current regime because we have a -- we participate in
7 an international market. We -- you know, at a time in the
8 1970s and '80s when we had a relatively isolated dairy
9 market, and if prices were higher, they led to government
10 buying stocks of dairy products. We don't have that
11 situation now. We have a -- we have an export-oriented
12 dairy industry. Markets are -- markets clear in a broader
13 sense, and we do not have support programs that buy up
14 product to -- to -- that reflect some sort of unnecessary
15 surplus. So there is no such thing as overproduction
16 under the current regime.

17 Q. Well, that's -- I'll accept your use of the terms
18 then that, nonetheless, you agree that if the Class I
19 price is high relative to the value of fluid use, any
20 production results from that will end up in Class IV
21 products that are exported, correct?

22 A. Class III products. And they would be -- there is
23 a demand domestically as well to broader international
24 market. There's a broader market nationally and
25 internationally. That's not the purpose of the Federal
26 Order, to -- to sell into international markets. But the
27 Federal Order is less constrained today by the size of our
28 domestic market than it was 40 years ago.



1 Q. But that less constrained necessarily means that
2 we have to find export markets for Class III and Class IV,
3 correct?

4 A. We do, and we would anyway.

5 Q. Well, doesn't there necessarily, since you don't
6 use the word overproduction, mean that if there is more
7 milk produced because Class I prices are set high, and as
8 a result, that milk goes into Class III or Class IV, it is
9 exported, that's the lack of constraint, correct?

10 A. That's the lack of constraint. We are competitive
11 in the world market, and part of our production goes into
12 exports.

13 Q. As a basic principle of economics, do you want the
14 price of fluid milk to track actual demand supply?

15 A. Yes, and it does.

16 Q. And part of that is now the Class I utilization in
17 the United States for all milk is approximately 18%,
18 correct?

19 A. If you say so. One of the graphs that was
20 presented during this proceeding showed Class I milk and
21 Federal Order milk overall, and it seemed to me that
22 Class I milk has been, you know, not -- not rising, but
23 not declining substantially. It's roughly a flat volume.

24 Q. You don't think the evidence has shown that both
25 the percentage and the actual volume has gone down?

26 A. It's -- it's gone down modestly in total volume.

27 Q. You appear to criticize the USDSS model as being
28 only for an efficient market, correct?



1 A. It's -- the DSS -- the USDSS model is an -- is an
2 engineered solution that only represents reality in a
3 centrally-managed system. It is a reasonable foundation
4 for assessing what the most efficient flow of milk would
5 be in theory. But there are differences between that and
6 what the results of a purely competitive market -- a
7 purely competitive market where there were hundreds of
8 milk plants in every state, that's what it would look
9 like. But that's not what we have. We have a competitive
10 market with larger plants, larger companies. And so
11 there's substantial differences between the results of the
12 USDSS model and what an efficient result from the current
13 market would be.

14 The other thing about the USDSS model that's worth
15 looking at is that the production nodes in the model are
16 all constrained by the current plant volumes, which
17 actually creates some -- some -- some binding constraints
18 in the solution for the model. I think that needs some
19 consideration, because the model doesn't -- and it --
20 while on the one hand it generates an efficient -- you
21 know, the most efficient result given the current plant,
22 the distance to the current plants, it's not necessarily
23 the most efficient if you read -- if you were in a
24 position to expand or rebuild plants.

25 Q. Well, but -- okay. First, the model, not just
26 current plants, but National Milk asked for new plants to
27 be included, correct?

28 A. I believe so. I -- I heard something like that.



1 I don't -- I don't -- I don't recall exactly. I wouldn't
2 testify to it.

3 Q. Didn't Dr. Nicholson testify he was asked to and
4 included plants that were planned as opposed to in
5 existence?

6 A. I would defer to the record.

7 Q. If the Federal Orders are designed for minimum
8 prices, doesn't the model provide a good goal for the
9 minimum price and then allow over-order premiums to adjust
10 for market realities?

11 A. I'm sorry, could you repeat the question?

12 Q. Given the fact that Federal Milk Marketing Orders
13 are to set minimum prices, why isn't it the case that the
14 model, if it's a so-called engineered solution, provides a
15 minimum price mechanism and then to the extent the actual
16 market moves differently -- works differently, allow
17 over-order premiums to make up that difference?

18 A. I'm sorry, I still don't understand what the
19 question is.

20 MR. ENGLISH: Could you repeat it again, please?

21 THE COURT: No. I don't want her to take that
22 time.

23 So you are asking him -- I am having trouble, too.
24 What is the "why" you want him to answer?

25 MR. ENGLISH: I will try it again, although I
26 think the question was perfectly clear, Your Honor.

27 BY MR. ENGLISH:

28 Q. You agree that Federal Orders set minimum prices,



1 correct?

2 A. Yes.

3 Q. Given the fact that Federal Orders establish
4 minimum prices, and the model, in your view, provides an
5 engineered solution for a sort of perfectly efficient
6 market, why don't we allow over-order premiums to then
7 fill in the difference where reality is different from an
8 engineered solution?

9 A. Well, there's two -- let me answer it in two
10 parts. One of them is to the extent that the model is the
11 basis for setting the Class I differentials, then we would
12 be relying on the -- on over-order premiums to kind of
13 fill in those gaps.

14 But the other thing is, it's a reasonable thing to
15 make some adjustments to the model in establishing the
16 Class I differentials for those circumstances where it is
17 foreseeable what the -- what sort of the competitive
18 issues are that would generate different results or that
19 equity would dictate should generate different results.

20 Q. Is it a reasonable set of adjustments to adjust
21 for the model for just under 2,900 of the counties in the
22 continental United States out of 3,108?

23 A. I wouldn't -- I have not looked at every county.
24 I have not looked at every situation. But I have
25 certainly heard the convincing arguments from some of
26 National Milk's witnesses that there are circumstances
27 where it's a reasonable thing to make adjustments to -- as
28 I said in the testimony, to -- for example, to recognize



1 that a metropolitan market is served by a couple of plants
2 on opposite sides of town, and that the fact that the
3 engineering solution suggests that there should be a big
4 difference between the two because there's a lot of
5 population in between two plants that are 30 miles apart.
6 Doesn't mean that that -- you know, that the -- that's a
7 reasonable -- it's a reasonable thing to kind of smooth
8 those things out to -- to apply a closer relationship than
9 the model might suggest.

10 The thing about a model like that is that there's
11 some things, some tipping points where you could have a
12 very big difference that makes sense from an engineering
13 point of view between two places where, in a competitive
14 market, it wouldn't follow.

15 Q. Should AMS embrace or write into regulations
16 prices that would represent an inefficient market?

17 A. No. I mean, the objectives -- my understanding of
18 the objectives that National Milk is pursuing in their
19 adjustments, and certainly the objectives I would hope
20 that USDA would apply, is to actually make adjustments
21 that -- that represent the results from -- from an
22 efficient market, like an efficient competitive market
23 which is, again, very different from the sort of central
24 planning that is -- that is the only direct application
25 for the model alone.

26 Q. So leaving aside what any adjustments have made --
27 let me ask the question a slightly different way.

28 Do you agree that AMS should establish, in the



1 regulations for minimum prices, representations of an
2 efficient market?

3 A. Of an efficient competitive market?

4 Q. Yes. Do you agree with that statement?

5 A. I agree with that statement, and that differs from
6 the exact results of the model.

7 Q. How does that differ from the exact results of the
8 model?

9 A. I have just been explaining it.

10 Q. What specific ways?

11 A. As I said, there are situations, for example,
12 where a metropolitan market is served by multiple plants,
13 and it's a reasonable thing for those multiple plants to
14 have a similar Class I differential, even if the model
15 would indicate that they should have a very different
16 model -- differential, just because, for example, there's
17 a large population in between two relatively close plants.
18 There are -- there are -- there are -- and there are a
19 range of other reasons that -- that don't -- you know,
20 there are -- there are a number of reasons that National
21 Milk is offering evidence on.

22 If you believe that there are differences, if you
23 believe there is -- that is not justified, I would -- I
24 would, you know, encourage you to put on witnesses, as I
25 am sure you will, that would suggest alternative
26 adjustments. And I will trust ultimately in USDA to make
27 fair and equitable adjustments to the model based on the
28 record and what they hear from both National Milk and



1 other groups.

2 Q. Well, speaking again of the adjustments and
3 turning to Exhibit 384, which is American Farm Bureau
4 Federation Exhibit 5B, and it's the fourth page -- I have
5 to say the fourth page, because as you suggested
6 yesterday, not every one is labeled with a figure -- so
7 this is the fourth page, the difference between NMPF
8 proposed differentials and the average May and October
9 model estimates.

10 Do you see that document?

11 A. I do.

12 Q. Is it a reasonable set of adjustments for a range,
13 as you have shown, of minus \$0.75 to plus \$1.15, which is
14 \$1.90 range?

15 A. I don't assume that it's unreasonable.

16 Q. Is it reasonable that the plus \$1.15 is -- a
17 little hard to know whether it's Panhandle Texas or
18 Southwest Oklahoma -- would you agree that's where that
19 is, that \$1.15 is either in Northeast Texas or Southwest
20 Oklahoma?

21 A. Yeah, it appears to be South -- sort of Southwest
22 Oklahoma or -- yeah.

23 THE COURT: So say again what you just said,
24 Dr. Cryan.

25 THE WITNESS: That \$1.15 is -- appears to be in --
26 in Northwestern Oklahoma (sic), just to the east of the
27 Texas panhandle. Presumably some of those lines reflect
28 the zoning of these -- you know, the establishment of the



1 zones rather than individual county numbers.

2 BY MR. ENGLISH:

3 Q. Now, you also say, I believe, that October would
4 be a better month to use, in your view, than the average?

5 A. It would seem to be.

6 (Court Reporter clarification.)

7 THE WITNESS: Yes, it would seem to be.

8 BY MR. ENGLISH:

9 Q. Doesn't that overstate the value of milk from a
10 minimum price perspective given the fact that there's
11 times of the year where it would be the other way because
12 of May in most locations?

13 A. I think it's reasonable to set the Class I
14 differential in such a way that you adequately meet the
15 fluid needs around the calendar, year round.

16 Q. Given 18% Class I utilization nationwide, do you
17 have any evidence that we do not have a sufficient amount
18 of milk for fluid use in this country already?

19 A. Do we have enough milk?

20 Q. For fluid use.

21 A. We have enough milk. The question is, is the
22 system set up to deliver it to those plants in a way that
23 is fair and equitable to producers.

24 Q. Doesn't that go back to my original question, that
25 do Class I differentials actually move milk to plants?

26 A. And as I said, they do.

27 Q. In an order with 6% Class I utilization, like the
28 Order 30, whether it's a \$1.80 or \$3 as proposed by



1 National Milk, \$3, 6% is \$0.18, correct? A \$3 Class I
2 differential in Minneapolis at a 6% utilization is \$0.18,
3 correct?

4 A. Maybe.

5 Q. You're an economist. You can't do that math with
6 \$3?

7 A. I won't do math on the stand. The last time I did
8 that I spent three hours doing math on the stand and spent
9 my dinner break doing math for the judge and the
10 cross-examining attorney. So I'm not going to do math on
11 the stand.

12 Q. Will you accept that 6% of \$3 is \$0.18 if you
13 don't do the math yourself?

14 A. If you say so.

15 Q. How much milk can you move at \$0.18?

16 A. You tell me.

17 Q. No, you are the witness who has just said --

18 THE COURT: You don't have enough variables for
19 your hypothetical.

20 MR. ENGLISH: If I need more variables, then
21 somebody would object that I have too many variables.

22 BY MR. ENGLISH:

23 Q. I've got \$0.18 contributed to the Federal Order
24 pool in Order 30 if National Milk's proposal is adopted,
25 and I'm asking how much milk can you move to a plant in
26 Minneapolis for \$0.18?

27 A. \$0.18 a gallon.

28 Q. \$0.18 a hundredweight.



1 A. \$0.18 a hundredweight. It's not just the price,
2 it's the -- it's the -- I mean, the price is part of it.
3 It's part of the encouragement to participate in the pool,
4 which encourages association with Class I handlers in
5 order to qualify for participation in the pool.

6 Q. Given the level of depooling in Order 30 based
7 upon class differences in III and IV, is that incentive
8 real?

9 A. Say that again.

10 Q. Is that a real incentive in Order 30, given the
11 ease and the level of which milk is depooled in Order 30?

12 A. I know a farmer who -- who changed co-ops over
13 \$0.30 a hundredweight. I think \$0.18 is a significant
14 incentive.

15 Q. Everybody gets that \$0.18, don't they, who's
16 pooled?

17 A. Everyone who pools.

18 Q. Yeah. And so everyone gets it, even though only
19 the producers who ship it incur the cost, correct?

20 A. The organization with which that pool producer is
21 associated is allowed to divert milk depooled milk to
22 manufacturing plants, manufacturing uses, in exchange for
23 their association with the Class I plant. And that
24 Class I plant needs to be supplied in order to have that
25 milk diverted.

26 Q. I want to come back to a question I think was
27 asked by a different examiner of a different witness.

28 Just because you can raise prices on Class I, does



1 that make it the right thing to do, given the fact that
2 Class I is only 18% of the total milk supply today?

3 A. What is being proposed is a simple update to
4 numbers that are far out of date. Inflation alone has --
5 justifies probably more than what National Milk's asking
6 for.

7 Q. Is that how markets work, that just because of
8 inflation, increase the price?

9 A. The -- the numbers -- the model's been run. The
10 same -- the same methodology in principle has been applied
11 that was applied in 1998, and it's being -- it's being
12 applied now in order to update the numbers to follow the
13 same principles. Some of the proposals out here that were
14 being considered in this proceeding are simply an update
15 following the same basic procedures, the same basic
16 principles as was done at the time of order reform. Most
17 of these numbers have not been updated in 25 years. So
18 it's a reasonable thing to apply the same approach and say
19 these are the updates that are necessary.

20 Q. In the case of Class I, however, in those
21 25 years, milk production has gone up in the United
22 States, correct?

23 A. Yes.

24 Q. And Class I, absent sales, have gone down,
25 correct?

26 A. Probably. I believe so, but not -- not
27 dramatically.

28 Q. How -- shouldn't USDA consider those changed



1 circumstances in considering whether or not it should
2 follow a different principle today?

3 A. To the extent that I would believe that, it would
4 be because the maintenance of the system requires an
5 incentive to participate. It requires a PPD above zero.
6 And then there are arguments that differential makes
7 should be even higher in order to better ensure the
8 hierarchy of class prices and the availability of funds in
9 the calculation of the PPD that encourages participation.

10 Q. Is there a point at which Class I utilization
11 drops to a level the Class I becomes irrelevant for this
12 purpose?

13 A. I wouldn't -- I wouldn't identify a particular
14 level that that is irrelevant. Zero is probably -- makes
15 it irrelevant. Beyond that, I -- I wouldn't -- I wouldn't
16 put a finger on any particular level.

17 Q. You have this discussion about -- and you actually
18 used the word "overproduction" in your testimony, by the
19 way, so I didn't use it on my own. You say, "The purpose
20 of the Class I differential" --

21 THE COURT: Where are you, Mr. English?

22 MR. ENGLISH: Well, I don't have a page number,
23 but it's from his testimony. I took a quote. I may have
24 to get back -- I'm literally quoting from his statement.
25 I apologize, this was the testimony I got yesterday,
26 and -- but I will quote from it. If I have to come back
27 with a citation, I will.

28 "The purpose of the Class I differential" --



1 THE COURT: You are saying that it is on
2 Proposal 21?

3 MR. ENGLISH: It is in his Exhibit 383. It is not
4 on Proposal 21, because that is Class II. It's on the
5 discussion of Class I. If you want me to take a break to
6 find the citation, Your Honor, I will. He can tell me he
7 didn't say this --

8 THE COURT: Okay. I'm going to listen for your
9 words. I think you are on page 2, but go ahead.

10 THE WITNESS: I used the word "overproduction"
11 in --

12 MR. ENGLISH: It's not on page 2, Your Honor,
13 because --

14 THE WITNESS: -- in criticizing Ms. Keefe's use of
15 the word of "overproduction," indicating that there is no
16 such thing as overproduction.

17 THE COURT: Thank you.

18 BY MR. ENGLISH:

19 Q. And let me read you the quote, and you can tell me
20 that's the intention of what the statement was on page 8.

21 A. On page 8, that's what I found, near the bottom.

22 Q. Yes. You are correct.

23 A. Thank you.

24 MR. ENGLISH: It's on page 8, in the conclusion,
25 Your Honor.

26 BY MR. ENGLISH:

27 Q. "The purpose of the Class I differential is to
28 assure a fluid milk supply and orderly marketing of milk



1 overall. A higher Class I differential will do that. It
2 will not cause 'overproduction' per se, which doesn't
3 really exist as long as processing capacity can keep up."

4 So first, your use of "overproduction" is not your
5 word, you are saying here that it was from --

6 A. Ms. Keefe.

7 Q. -- Ms. Keefe?

8 A. That's correct.

9 Q. Now, the part about "it doesn't exist as long as
10 processing capacity can keep up," you don't mean Class I
11 processing capacity can keep up, do you?

12 A. No.

13 Q. Because by definition, Class I processing
14 capacity -- let me back up.

15 You are not saying that Class I processors don't
16 run as much milk as they can based upon what consumers
17 require?

18 A. No.

19 Q. Isn't it the case that there have been times when
20 processing capacity in some parts of the country has not
21 actually kept up, such as in the Northeast?

22 A. On a temporary basis, yeah. But there's been a
23 rapid construction of all kinds of processing plants,
24 manufacturing plants. You have a lot of cheese capacity
25 now, and we have a substantial amount of nonfat dry milk
26 capacity.

27 Q. But until that capacity is built, doesn't that
28 mean there's overproduction?



1 A. To the extent that a seasonal surge in production
2 can lead to milk dumping because there's no place to put
3 it, then that can be -- that's arguably overproduction.

4 Milk dumping isn't necessarily an inefficiency.
5 If milk production is seasonal, a certain amount of
6 dumping over a week or two could be a logical result of an
7 efficient system to make sure there's enough milk for the
8 rest of the year.

9 Q. Do you think processors have an obligation under
10 the Federal Order system to ensure that processing
11 capacity keeps up with production regardless of the retail
12 and consumer realities of ultimately selling the product?

13 A. No. And they don't have to, the market takes care
14 of that.

15 Q. The market takes care of it by resulting in lower
16 prices for manufactured products?

17 A. By building manufacturing plants.

18 Q. And that additional capacity running in Class III
19 or Class IV will have some impact on the prices of those
20 products returned to producers, correct?

21 A. Some impact. But, again, we are selling -- in
22 particular, we are selling Class IV products into an
23 international market where additional volume has a
24 relatively small impact on world prices.

25 Q. You also state that fluid plants today are
26 typically running with slack capacity.

27 A. Fluid plants.

28 Q. Fluid plants.



1 A. Right.

2 Q. Correct. If they are running at slack capacity,
3 doesn't that mean they don't need more milk?

4 A. They need -- not necessarily, no. Not
5 necessarily.

6 Q. Have you heard testimony this week about plants
7 closing, especially from Mr. Hoeger, in the Order 32 area?

8 A. I don't recall it, but I -- I defer to the record.

9 Q. You know that plants, Class I plants, are
10 routinely closing in this country, correct?

11 A. We have a lot of Class I plants.

12 Q. But we have closed a fair number, haven't we?

13 A. I believe so.

14 Q. Isn't that the result of consumers buying less
15 fluid milk, and fluid milk plants are not able to run as
16 much milk as they used to for those plants?

17 A. The -- I think it's the result of a stable market.
18 There are still -- when a new plant is constructed,
19 it's -- it's -- mathematically speaking, it's taking
20 volume that was being handled by other plants, and so
21 plants close.

22 Q. And to the extent plants are running less fluid
23 milk, isn't it the case that a number of fluid milk
24 plants, whether proprietarily owned or cooperative owned,
25 are running through their plants products that are not
26 milk based, but nonetheless claim to be dairy products?

27 A. Could you specify?

28 Q. Oat milk, almond milk, products like that?



1 A. Products that have no legal foundation for the --
2 that naming, and yet are labeled as such?

3 Q. I'm not here in the label conversation, sir. I'm
4 just asking, if that's what they are called. And, listen,
5 I'm not getting into a dispute about that. I'm merely
6 saying, isn't the case that in order to fill capacity in
7 plants that are -- as you say, have slack fluid capacity,
8 that one way plants are dealing with that as opposed to
9 closing is to run through their plants products that use
10 the name milk, like oat milk or almond milk or soy milk,
11 correct?

12 A. I know it's been the longstanding practice for
13 dairy plants to also bottle orange juice, and Belly Wash,
14 and a range of other products that can take advantage of
15 the existing infrastructure. I don't -- I don't have
16 knowledge offhand of plants that are also producing milk
17 substitutes in the same plant, but it doesn't seem
18 unbelievable.

19 Q. That's a development since Federal Order Reform,
20 correct? It's a change in the universe, correct?

21 A. What is?

22 Q. The running of those kinds of products, oat milk,
23 soy milk, and almond milk, through fluid milk plants,
24 correct?

25 A. I don't believe that has anything to do with
26 Federal Order Reform.

27 Q. I didn't say it did. I said that's something
28 that's a fact that didn't exist at the time of Federal



1 Order Reform, correct?

2 A. I don't -- I don't recall how large the soy milk
3 market was -- the "soy milk," quotation, air quotes --
4 market was before 2000, but I believe there was some
5 market for the -- for soy beverage.

6 Q. It has vastly expanded since that time, correct,
7 sir?

8 A. I believe so.

9 Q. And oat milk, I think, is a development in the
10 last five years, correct, sir?

11 A. I believe the volume was grown quite a bit in the
12 last five years, yes.

13 Q. Do you believe the Class I processors are making
14 the best efforts to maximize sales and increase production
15 of fluid milk?

16 A. I believe the Class I processors --

17 Q. Yes.

18 A. -- are doing their best --

19 Q. Are doing their best to maximize their sales and
20 to find innovative ways to increase sales of Class I?

21 A. I suppose they -- that's in their best interest,
22 so they are doing that.

23 Q. Have you heard testimony in this proceeding that's
24 happening?

25 A. Offhand I don't recall any specific testimony to
26 that effect, but I would defer to the record.

27 Q. Do you agree that growth in Class I has to start
28 and end with consumers?



1 A. I mean, if it was as simple as that, we would have
2 no reason for promotion programs or marketing departments.
3 But it does have to run through consumers.

4 Q. Well, okay. Another way of putting it is
5 processors will only be able to process more milk if
6 buyers will buy it, correct?

7 A. Fluid processors will process more milk if
8 consumers will buy it, correct.

9 Q. Let's see -- let's go now and talk about Class I
10 prices and whether it's National Milk's proposal or how we
11 set it.

12 In setting Class I prices, should USDA apply
13 consistent principles?

14 A. They should apply a set of consistent principles.

15 Q. All right. I will accept a set of consistent
16 principles, correct?

17 A. Sure. Recognizing that as a consistency, a
18 foolish consistency is the hobgoblin of little minds.

19 Q. Do you think USDA has, in the past, applied
20 foolish inconsistency?

21 A. Foolish consistency.

22 Q. Foolish consistency?

23 A. No. I think they applied a set of consistent
24 principles in 1998, and I look forward to them doing so
25 again.

26 Q. I want to spend just a little time on Table 1
27 found on page 8 of Exhibit 383.

28 A. Okay.



1 Q. So what is the source of each column in this
2 table? So let's start with the Class III price. You have
3 used an average for each year, correct?

4 A. That's the source from AMS.

5 Q. And the Class III price, of course, is based upon
6 a formula that USDA has established, which includes both
7 the Make Allowance -- well, not just both -- the
8 Make Allowance, the yield factors, and ultimately, of
9 course, the price reporting for Class III products,
10 correct?

11 A. Class III is based on -- that's right.

12 Q. Okay. Now, I looked at your citation for Table 7
13 on 63 Federal Register, page 4908, and I think the column
14 that you are comparing Class III price to on Table 1 was
15 the basic formula price back at that timeframe.

16 THE COURT: Was the what?

17 MR. ENGLISH: Basic formula price.

18 BY MR. ENGLISH:

19 Q. Correct?

20 A. Which was the Class III price at the time.

21 Q. Yes, was the Class III price at the time.

22 But the basic formula price was different from the
23 Class III price as calculated today, correct? The
24 calculations were different, correct?

25 A. Yes.

26 Q. Okay. The basic formula price was based upon two
27 factors, the survey of Grade B milk and a change from the
28 prior month based upon the change in product prices,



1 correct? In simplest terms?

2 A. The Grade B price -- say that again, please.

3 Q. The basic formula price -- well, let's back up.

4 The basic formula price replaced the

5 Minnesota-Wisconsin price, correct?

6 A. Right.

7 Q. The Minnesota-Wisconsin price was a straight-up

8 Grade B survey, correct?

9 A. That's right.

10 Q. And the basic formula price replaced the
11 Minnesota-Wisconsin price because there were concerns that
12 the volume and number of producers and purchasers of
13 Grade B milk was shrinking such that there needed to be a
14 more robust price surface, correct?

15 A. The basic formula price was based on the MW price
16 adjusted with a sort of zero sum product price adjuster
17 that allowed for a more up-to-date price to be applied to
18 the Class III -- Class III pricing at the end of the
19 month.

20 Q. Thank you. You said it much better than I did.
21 Thank you.

22 A. So it was still fundamentally -- the BFP price was
23 still fundamentally based on the MW price.

24 Q. And the MW price, again, was a Grade B price,
25 correct?

26 A. That's correct.

27 Q. To the extent USDA made a comparison in 1998, we
28 don't have any survey of Grade B milk today, do we?



1 A. No.

2 Q. So how haven't you made an apples-to-oranges
3 comparison when you now use, on Table 1 on page 13, the
4 Class III price, which does not have in it a survey of
5 Grade B milk?

6 A. No. I don't think so. It's the Class III price.

7 Q. But you agree the Class III price today is not
8 based in any way on a survey of Grade B milk, is it?

9 A. The Class III -- the BFP was the Class III price
10 in 1998, and the Class III price is the Class III price
11 today.

12 Q. Wasn't the point that USDA was comparing the price
13 of Grade B and Grade A back in 1998?

14 A. I think if they intended to do that, they would
15 have simply used the MW price.

16 Q. Well, they didn't have an MW price, they had a
17 BFP, correct?

18 A. They did have an MW price. That was the price,
19 still collected at that time, upon which the BFP was
20 based. I think there was a specific intent to compare the
21 fluid grade milk price in those two states to the
22 Class III price, which was the principal regulated
23 manufacturing price at the time.

24 This whole thing is based -- the whole calculation
25 was intended to show the assessment of the competitive --
26 the competitive -- the additional money required in the
27 competitive market to attract milk, fluid grade milk, into
28 the market over and above the basic manufacturing price in



1 that market, in the Minnesota-Wisconsin, Class III, the
2 cheese milk price is -- is the predominant manufacturing
3 use, and it's an appropriate foundation for assessing
4 that.

5 Q. Isn't the Class III price today necessarily
6 including Grade A milk in it?

7 A. Yes.

8 Q. Thank you.

9 A. Well, let me back up. It is not a milk price
10 survey. It is a -- it is a formula based on product
11 prices. So I don't believe that the products -- I don't
12 believe the products in the survey are necessarily --
13 necessarily require that they are based on -- they're made
14 from Grade A milk. I don't believe that's -- that's a
15 mandate. I believe that butter, powder, whey, and cheese
16 can be produced from Grade B milk and still be in the
17 survey. If that's incorrect, I trust someone will correct
18 it.

19 Q. But regardless, it is also the case that products
20 made with Grade A are included in the survey, correct?

21 A. The Class III price in 1998 and in 2023 is applied
22 in the Federal Milk Marketing Order system which says milk
23 must be Grade A.

24 Q. Okay. That's not my question, sir. So let's -- I
25 don't want to belabor it. I think we actually had an
26 answer a moment ago.

27 The reality is, today's Class III price that you
28 use in the first column necessarily includes products made



1 with Grade A milk, correct?

2 A. You mean not all products in the survey are made
3 with Grade B milk?

4 Q. Yes.

5 A. I would agree with that.

6 Q. And, in fact, if Grade B milk constitutes about 1%
7 of the milk in this country, almost certainly that
8 Class III price is largely, if not 95 or more percent,
9 made up of Grade A milk, correct?

10 A. Probably.

11 Q. Okay. You also assert that one reason for raising
12 Class I differentials -- and you discuss this with respect
13 to Class II -- is that they must be large enough to allow
14 for consistent hierarchy of class prices, correct?

15 A. That's correct.

16 Q. We have had testimony on different -- other
17 proposals, the component issue or the base Class I skim
18 milk price, aren't the points of those proposals to
19 establish that the correct price restraint relationship?

20 A. Which proposals?

21 Q. Whether it's the Issues 1 and 2 component pricing,
22 or the whole conversation in -- about the base Class I
23 skim milk price, isn't the purpose of those to establish
24 the price for proper relationship?

25 A. All of them contribute to establishing a proper
26 relationship.

27 Q. Isn't --

28 A. There are -- that's one of our priorities in



1 this -- is -- in this hearing, is to support proposals
2 that -- that tend to put the class prices in the proper
3 relationship with one another --

4 Q. Isn't --

5 A. -- on a consistent month-by-month basis. Sorry.

6 Q. I'm sorry.

7 So isn't the purpose of the variable portion of
8 the Class I differential to attract location value of
9 milk?

10 A. The purpose of what?

11 Q. A variable portion, the portion of the Class I
12 differential that varies from county to county?

13 A. Yes.

14 Q. You agree that that's to address the location
15 value of milk?

16 A. That's correct.

17 Q. Turning now more specifically to your discussion
18 about MIG-20. As to Grade A conversation --

19 MR. ENGLISH: It is on pages 5 and 6, Your Honor.

20 THE COURT: Thank you.

21 BY MR. ENGLISH:

22 Q. -- you say that Federal Orders "provided, and
23 continue to provide, a sound incentive to producers to
24 maintain Grade A status."

25 What evidence do you have that there needs to be a
26 continued incentive to maintain Grade A status in a market
27 where 1% of the milk is Grade B?

28 A. The system has worked, and I think it's best to



1 keep it intact.

2 Q. Are you aware of any processor or manufacturer in
3 any class that actively seeks out Grade B milk?

4 A. No. I don't know if there's such thing, but I
5 don't know. I'm not aware of any.

6 Q. Turning to the conversation on balancing, on
7 pages 6 and 7.

8 Does American Farm Bureau Federation have any
9 experience in the area of balancing?

10 A. Yes. We have thousands of members who are dairy
11 farmers, who are cooperative members, cooperative board
12 members, cooperative officers. We have members who have
13 expressed their interest and concerns in establishing
14 policies to support prices in the Federal Order system
15 that encourage these balancing costs to be compensated.

16 Q. Have you measured or calculated what the cost is
17 for suppliers for balancing?

18 THE COURT: For suppliers?

19 MR. ENGLISH: Suppliers for balancing.

20 THE WITNESS: I would say that I have looked at
21 the original justification in 1998 and applied a
22 similarly -- a similar approach.

23 BY MR. ENGLISH:

24 Q. Again, that assumes that the market was static
25 since 1998, and there's been no changes in how milk is
26 marketed?

27 A. Well, there have been changes, and that's what
28 this is based on.



1 Q. Aren't some of those changes that there are now
2 operations in Class I that actually take milk on a basis
3 where they are self-balancing?

4 A. I -- I haven't heard that testimony, but if --
5 what I understand is on a regular basis, if a Class I
6 handler takes steps to better balance their own supplies,
7 they often do it on the basis of an arrangement with the
8 cooperative where they -- where they -- where they pay
9 less for the milk.

10 Q. Which is to say it happens outside the Federal
11 Order system?

12 A. Right.

13 Q. You have got -- you have discussion on page 7 of
14 hauling rates.

15 Aren't hauling rates already factored into the
16 Class I differential location values in the model?

17 A. They are factored into the location differentials
18 in the model, which is that efficient movement of milk.
19 But it doesn't -- but it reflects -- the increase in
20 hauling rates reflects some of the increase in costs of
21 balancing by moving milk from distant locations to fluid
22 plants when needed. It's a specific element.

23 Q. Doesn't it work the other way around that when
24 they are balancing, they are more likely not moving the
25 milk to the Class I plant, instead, moving it to the
26 closer manufacturing plant?

27 A. Well, depends on how you are talking about
28 balancing. I mean, ultimately, the objective is to get



1 milk to fluid plants when needed, and that when the --
2 when supplies are short, that involves moving milk to --
3 from further out into the fluid plant.

4 Arguably, the balancing also involves moving milk
5 to -- that's close into the flush season, is moving milk
6 that's close into the fluid plant to further out
7 manufacturing plants. But that all takes hauling. That
8 raises the costs. And hauling costs were part of the
9 consideration in 1998.

10 Q. So let's turn to the conversation on incentive on
11 page 7, and it will tie into your discussion about
12 Dr. Stephenson's presubmitted but not yet provided
13 testimony.

14 It appears from your testimony that your analysis
15 regarding the need to incentivize the Class I market and
16 the value which should be perceived in the base Class I
17 differential is based on the values calculated during
18 Federal Order Reform from 1995 and 1996, correct?

19 A. Right.

20 Q. Have you done any economic analysis or
21 calculations to determine what that value is today?

22 A. That's what Table 1 is.

23 Q. I thought Table 1 was your analysis of the
24 difference between Grade A and the Class III price.

25 A. That is, to the best of my understanding, what the
26 Table 7 and 1998 represented.

27 Q. So are you double counting? You are applying it
28 both to the Grade A piece and now to the incentive piece?



1 I'm talking about the incentive piece now, not the Grade A
2 piece.

3 A. Right. Incentive piece is what -- what it takes
4 to deliver Grade A milk to the market compared to the
5 manufacturing price. The set of milk that's eligible for
6 delivery to bottling plants, what does it take to get that
7 milk, having once incentivized the producer to maintain
8 the Grade A status, what additional incentive does it
9 require to move that Grade A milk into the -- into the
10 fluid market?

11 Q. So going back to Table 1 now on page 8, what is
12 the source for your information under the column
13 "Minnesota" for "Grade A Pay Price" at 3.5%?

14 A. That's the -- that's the price for fluid grade
15 milk in Minnesota according to the NASS.

16 Q. And, again, 99% of which is now all Grade A,
17 correct?

18 A. I haven't looked at the -- I don't recall what the
19 percentage is in Minnesota at the moment, but it's in that
20 ballpark.

21 Q. You are aware that Dr. Stephenson's analysis
22 performed for MIG was to value that incentive piece,
23 correct?

24 A. Value what incentive?

25 Q. That incentive piece. The purpose of his
26 testimony was to value that incentive piece, correct?

27 A. I read his testimony. I don't recall that
28 conclusion. I don't recall that element, but I would --



1 if you say so.

2 Q. So if I asked you to discuss your views versus his
3 views, you don't have that information partly because he
4 hasn't testified yet, correct?

5 A. His testimony has been presubmitted. He somewhat
6 offhandedly dismisses all three elements of this. I
7 addressed the arguments that I thought needed be to
8 addressed.

9 Q. So coming back to incentive piece, hasn't he found
10 that further incremental payments are not necessary to
11 incentivize milk to meet fluid processing needs?

12 A. I don't know -- I don't recall that that's based
13 on any particular study. My -- my recollection is that
14 that's based on his -- his opinion based on his
15 experience.

16 Q. You didn't read his testimony as being a use of
17 the very same model that was used by National Milk with a
18 different output?

19 A. If you are talking about his -- his application of
20 the average shadow price for -- for Class I milk versus
21 manufacturing milk, as I said in my testimony, I don't
22 think that's appropriate, because it's a misinterpretation
23 of his own results.

24 I don't think that is relevant. It takes -- it
25 doesn't consider all the factors that have gone into his
26 establishing the minimum Class I price. The engineering
27 approach of the USDSS model does not take any of that into
28 consideration. That's the reason why it has some



1 limitations. It has to be adjusted, has to be considered,
2 and it doesn't really speak to what the minimum Class I
3 differential does.

4 The Class I -- minimum Class I differential can be
5 looked at two ways. It can be looked at in terms of those
6 three elements. It can be looked at much more broadly in
7 terms of what is the minimum Class I differential required
8 to contribute to consistent hierarchy of class prices,
9 substantial volume of revenue available for the pool,
10 and -- and a general incentive over time to maintain the
11 Federal Order system to the benefit of producers and
12 processors.

13 Q. We'll hear from Dr. Stephenson about his
14 interpretation of his model.

15 It's not your model, is it?

16 A. It's not my model, but I understand it.

17 Q. Do you understand it better than Dr. Stephenson?

18 A. I think I have thought of some things that he
19 hasn't thought of. It's a very complicated model.
20 There's a lot involved, and he did very good work in
21 putting it together. But it is what it is, and it is not
22 what it isn't.

23 Q. Do you have any evidence that fluid milk plants
24 are seeking out, but not receiving, sufficient raw milk
25 supplies?

26 (Court Reporter clarification.)

27 MR. ENGLISH: Raw milk supplies.

28 THE WITNESS: The system -- the system generally



1 works. At times there has to be a premium. But like
2 Mr. Sims testified that, you know, over-order premiums can
3 be ephemeral, and regulated prices can be more durable,
4 and that relationship helps maintain stability and order
5 in the market.

6 BY MR. ENGLISH:

7 Q. You say you're curious as to how capacity affects
8 the results in Dr. Stephenson's analysis, correct?

9 A. I do not understand whether he is establishing a
10 shadow price at a full manufacturing node that reflects
11 the value of an additional hundredweight of milk being
12 available, which would be presumably limited if that node
13 is full, or whether he is essentially representing the
14 shadow value of an additional hundred pounds of processing
15 capacity at that location.

16 Q. With respect to capacity, were you here when
17 Dr. Nicholson testified?

18 A. I was.

19 Q. And did you ask him about how the model measures
20 capacity?

21 A. I had not seen -- I had not read Dr. Stephenson's
22 testimony, his statement, so I did not have a reason to
23 ask that, no.

24 Q. You had opportunity to because it was presubmitted
25 at the same time as NMPF 19, correct?

26 A. Probably. I probably did have an opportunity to.

27 Q. Are you aware that the USDSS's model measures
28 monthly capacity?



1 A. Monthly capacity.

2 Q. Monthly capacity.

3 A. It's based on monthly data.

4 Q. It's based on monthly data.

5 Are you aware of that?

6 A. On a specific month's data, which means it does
7 not take into consideration variation from month to month
8 aside from running different months and making some other
9 comparison.

10 Q. You don't think it runs on monthly capacity over a
11 period of time so it does reflect seasonal production and
12 consumption changes?

13 A. I'm not sure what you are asking me.

14 Q. Well, 45 seconds ago you said it's run on one
15 month so it can't take into consideration different
16 seasonal production.

17 And I'm saying, are you aware that it does run
18 multiple months over a period of time, so it can reflect
19 seasonal production and consumption changes?

20 A. It reflects them -- it reflects the difference
21 from a month to another.

22 Q. Thank you again for your time, Dr. Cryan.

23 MR. ENGLISH: I have no further questions.

24 THE WITNESS: Thank you, Mr. English.

25 THE COURT: Who next has questions for Dr. Cryan?

26 I see --

27 THE WITNESS: I did ask Dr. Nicholson by e-mail,
28 and I don't know whether this is -- he said --



1 MR. ENGLISH: I object.

2 THE WITNESS: That's fine. That's fine.

3 THE COURT: You don't want that information?

4 MR. ENGLISH: No. It's clearly hearsay.

5 THE WITNESS: I understand. I agree. That's
6 fine.

7 MR. ENGLISH: Well, that's fine --

8 THE WITNESS: That's fine. That's fine.

9 THE COURT: It was responsive to your saying --

10 MR. ENGLISH: Yes.

11 THE COURT: -- you didn't talk to Dr. Nicholson
12 about his --

13 MR. ENGLISH: Okay. If you want to let him --

14 THE COURT: -- you had read his testimony --

15 MR. ENGLISH: -- I just, you know --

16 THE COURT: -- you had it available, and you
17 didn't --

18 MR. ENGLISH: Well, I understand. But
19 Nicholson -- Dr. Nicholson has testified. I mean, if
20 we're going to be able to e-mail people outside the
21 room --

22 THE COURT: No.

23 THE WITNESS: I'm not -- I'm not arguing.

24 THE COURT: He's not saying he just e-mailed him.

25 MR. ENGLISH: Yes, he is.

26 Aren't you saying you just did?

27 THE WITNESS: I just received -- I received the
28 e-mail earlier today.



1 THE COURT: Oh. I understand now, Mr. English,
2 why you are objecting. Okay.

3 THE WITNESS: And I understand the objection, and
4 I will not assist. On my behalf, I will not assist.

5 THE COURT: Does anyone else have questions before
6 I turn to the Agricultural Marketing Service for their
7 questions?

8 I see none. The Agricultural Marketing Service is
9 invited to ask questions of Dr. Cryan.

10 CROSS-EXAMINATION

11 BY MS. TAYLOR:

12 Q. Good morning.

13 A. Good morning.

14 Q. Thanks for coming back to testify.

15 A. Thank you for having me.

16 Q. I'm going to start with your Exhibit 382, and
17 that's where we're talking about Farm Bureau's
18 Proposal 21. And so I want to try to synthesize
19 everything to make sure we understand.

20 So your proposal is to base the Class II
21 differential solely on the cost of drying skim, not
22 considering the cost of drying condensed.

23 A. Right.

24 Q. Okay. And you want to incorporate the nonfat dry
25 milk Make Allowance, whatever that is, whatever that turns
26 out to be --

27 A. Right.

28 Q. -- along the same with the yield factor, whatever



1 it is or turns out to be --

2 A. That's the proposal.

3 Q. Okay. And then whatever the accepted pounds of
4 solids and skim are?

5 A. Correct.

6 Q. Solids in skim, okay. Excuse me.

7 A. Accepted solids test in skim milk, right.

8 Q. Yep. Okay.

9 On page 2 of that statement, 382, in the middle of
10 the paragraph the sentence reads, "However, we believe
11 that the simple update using the presumed cost of nonfat
12 dry milk processing achieves the original purpose of the
13 Class II differential."

14 And I was wondering what -- if you could explain
15 what you think the original purpose of the Class II
16 differential is.

17 A. I believe that the original purpose of the
18 Class II differential was to come as close to the Class I
19 differential as was practical without incentivizing an
20 economic drying of milk just for that price difference.
21 The -- as I -- as I testified I believe in the statement,
22 and certainly in cross-examination, Class II was, at one
23 time, part of Class I, and it was -- it was the evolution
24 of so many Class II products into sort of
25 nationally-branded and manufactured and shipped products
26 that argued for a national price for Class II rather than
27 a location-specific price for Class II.

28 So the original purpose is to recognize that



1 Class II processing in many cases requires the same sort
2 of balancing services as Class I.

3 Q. And so that leads to the next paragraph there,
4 where I think I understand you are saying, which would
5 justify, in your opinion, the Class II differential being
6 the lower of whatever this calculated value is or the --
7 or the base Class I differential?

8 A. Yeah, I -- I have to say that's -- that would be
9 reasonable to -- to cap this at the -- at the base Class I
10 differential, because that is consistent with our -- our
11 objectives of maintaining the hierarchy of class prices
12 and recognizing the balancing needs of Class II without
13 having the price exceed Class I.

14 Q. Okay. I know you -- I think this was discussed a
15 little bit yesterday -- oh, that's right. One other thing
16 before I turn to that question.

17 If we look at page 2, in the middle paragraph, the
18 sentence, start of the paragraph is "the original \$0.70."
19 And I'm looking at the third line down, and I'll read the
20 clause: "The differential should not be higher than the
21 cost to convert that relatively standard Class II
22 ingredient form into a Class IV form."

23 And I am wondering if II and IV in that sentence
24 should be reversed. And if not, then I just need you to
25 clarify for me what you mean.

26 A. Give me a moment to go over it.

27 No, I think that is right. The idea is that skim
28 condensed milk is this relatively standardized Class II



1 ingredient that's -- it -- you know, it's a -- milk is --
2 skim milk is condensed and shipped to the -- for
3 transportation savings, and is often used in Class II
4 products, and that the original foundation here was to
5 look at the conversion cost of skim condensed into
6 Class IV.

7 This paragraph is sort of aimed at taking stab at
8 the -- at what that would look like as opposed to just
9 using the full drying cost of skim milk.

10 I -- I asked a few people who said that, well, I
11 have talked to other people who said they had a hard time
12 finding any sort of condensing costs, which if there was
13 some record for condensing costs, that could provide you
14 an alternative based on the original argument. But I also
15 think that -- that there's also an argument for just using
16 the drying cost for skim milk as well.

17 Q. Okay. And then I'll turn to Exhibit 382, where
18 you do have a little bit on your Proposal 21 in the
19 beginning on the second page.

20 A. Which exhibit?

21 Q. Of, excuse me, 383.

22 A. Okay.

23 Q. And I do think -- well, my first question, in the
24 middle of the sentence of the paragraph -- in the
25 paragraph, it has a bolded line. You have a sentence that
26 reads, "For several reasons, including most specifically
27 the fact that much Class II use is at distributing
28 plants."



1 And I was wondering if you could -- if you had any
2 data or information to put on how much Class II use
3 actually occurs at distributing plants as opposed to
4 standalone Class II plants?

5 A. I do not. It certainly goes to some of the
6 questions that Mr. English was asking. And I suppose it's
7 a little too late for a data request, although if we're
8 going to continue in January --

9 Q. It's too late for data requests.

10 A. All right. Only USDA knows.

11 Q. Okay. And so I do think you touched on it with
12 Mr. English a little bit today, but I have a similar
13 question I wanted to ask about your thoughts on the -- you
14 know, the Federal Order system tries to ensure that,
15 whatever the number is, plants producing the same product
16 have similar raw milk costs, whatever that cost is.

17 And if you have Class II use at distributing
18 plants where they have to pool, and according to you
19 there's a lot of that use, I don't have the number, as
20 opposed to Class II plants that do not have to pool so
21 they cannot opt to do that, are we creating, like, you
22 talk about, the potential disparity between the raw milk
23 cost between those two plants?

24 A. Okay. Yes, I can talk about it.

25 Certainly Class II plants can depool now, and when
26 they do, it is more commonly based on which way the
27 Class IV price is moving, and now that relates to the
28 uniform price rather than the \$0.70 in the Class II price.



1 Raising that \$0.70 would cause -- there would be times
2 when that makes the difference for depooling Class II
3 plants. But much more frequently that would be the
4 difference between IV and the blend price.

5 I'd also say that there are benefits to plants to
6 pool, and that the, you know, Class II use at the
7 distributing plants typically offsets some of the Class I
8 value and reduces the pool contribution required by the
9 Class I plants. And by the same token, there's oftentimes
10 when -- when a plant, a Class II plant that depools
11 because it's -- because the Class II price is high, I
12 don't know what the disadvantage is to that. There's some
13 disparity, and it's based on pooling requirements and that
14 combination. I would -- I don't argue against that. I
15 don't argue that that's not the case.

16 Q. But it sounds like, in your opinion, the pooling
17 decision is more based on the Class IV price, not on the
18 differential, and not on the increased differential that
19 you proposed?

20 A. I think more -- it is more commonly based on the
21 difference between Class IV and the uniform price that is
22 on the Class II differential itself.

23 Let me give you an example that Mr. English
24 pointed out, show -- was -- where months where it was
25 really the Class IV price moving things more than the --
26 more than the differential.

27 Q. Okay. Turning to Proposal 19 which you support,
28 the National Milk proposal Class I differentials --



1 A. We do support it in principle. We support the
2 approach that National Milk's taken. We recognize there's
3 need for adjustments. But ultimately, we believe that the
4 Department should, and will, examine it in detail and make
5 a fair assessment of what's -- what's an equitable and
6 appropriate set of adjustments to the model.

7 Q. And you have a statement right at the top of that
8 section that says, "In effect, the ebbs and flows of local
9 and regional market conditions could wash away any sound
10 long-term price relationship which may be hard to
11 re-establish."

12 And I was wondering if you could expand on what
13 you mean by that statement?

14 A. I think that reflects what Mr. Sims testified to
15 about those -- about one of the reasons we have the
16 Federal Order system, is to sort of stabilize these
17 relationships that can come and go, you know, when the
18 supplies are needed, the arrangements can be made, and
19 they can be tossed out the window when they are not.

20 The Federal Order system provides some certainty
21 and stability in the pricing relationships. It's
22 market-oriented. It's aimed at relationships that -- that
23 reflect the actual cost and opportunity costs associated
24 with the whole system.

25 And as I testified, the system provides a fair
26 world for dairy farmers which encourages them to better
27 serve the entire industry and the public over the
28 long-term.



1 I think that's -- I think that's important that we
2 recognize the value of the system overall, that we have
3 through nine weeks of this kind of at times choked on the
4 bones. You know, we have -- we have gotten bogged down in
5 the details. And I think it's important on occasion to
6 recognize the big picture here, which is that the Federal
7 Order system provides -- has been a very successful
8 foundation, a very successful structure in which the dairy
9 industry here has thrived. I think Mr. Vanden Heuvel said
10 something along these lines, and I think my testimony
11 reflects that as well. I don't think we can overemphasize
12 that.

13 Q. And I gather from your testimony on this proposal,
14 you know, you look at the model that was used as a base,
15 as -- well, it's been testified to, kind of the most
16 efficient way to move milk. But that's not reality, and
17 you go back into -- mostly on page 4 of your testimony, to
18 talk about some of the other things that come into account
19 of reality, which is justification why adjustment -- well,
20 one, you say the model then proudly spits out conservative
21 estimates on costs, and then you have some reasons as to
22 why, and it makes sense to make adjustments off the model
23 to account for some competition, you know, plant
24 ownership, supply arrangements, et cetera, of which the
25 model probably doesn't take into account.

26 Would that be correct?

27 A. Yeah, two parts to my answer. One is that the
28 model -- the model is the most efficient result, if you --



1 if you -- if you were named commissar of milk movement and
2 had to make a decision about where everyone in the country
3 should get their milk from and which plant it should go
4 through, that model generates the most efficient result.
5 It does not correspond to a competitive milk market where
6 there's multiple companies in multiple markets competing
7 and finding different ways to appeal to different
8 customers.

9 So -- so the commissar approach would, in theory,
10 if we didn't value the -- you know, the importance of
11 competitiveness and achieving efficiencies, it would -- it
12 would lead to slightly -- slightly lower spreads across
13 the country, I believe. I believe the model is -- has
14 been established -- it establishes the spreads overall.

15 And I don't think -- I don't really think National
16 Milk's proposal, you know, changes that. I think they
17 have used these anchor cities as using the big picture
18 elements of the model as a foundation, and they are making
19 local adjustments. I do think a lot of these local
20 adjustments are appropriate.

21 Another adjustment that -- that makes sense is for
22 some of the increases in the Pacific Northwest based on
23 the export volume. I don't know that the model
24 necessarily reflects where exports are moving out of and
25 what those -- what those values are.

26 I think the National Milk folks had some
27 understanding of what all those things -- I think they
28 made a lot of decisions that -- you know, one of the



1 reasons this hearing is going so long is because National
2 Milk needs to come bring folks out and explain region by
3 region why there's a justification for doing what they are
4 doing. And I do think, you know, you are going to have to
5 examine each of those things and decide whether it makes
6 sense or whether it doesn't.

7 And I would anticipate, I would certainly hope,
8 that any of the proprietary handlers who feel that there's
9 other adjustments that should be made will present those
10 and you will take those fully into consideration so that
11 in the end we have a system that uses the bones of the
12 model, which will still be, I think, somewhat compressed
13 in terms of the regional variation, you know, compared to
14 what the actual system generates, and -- and make local
15 adjustments along those lines.

16 Does that answer your question?

17 Q. It does.

18 A. Thank you.

19 Q. Yep. I appreciate it.

20 A. Certainly. And I appreciate your attention. I
21 appreciate the quality of the questions from USDA through
22 the whole hearing. It demonstrates attention from them
23 and comprehension in ways that are reassuring.

24 Q. Okay. Let's see. I want to move into
25 Proposal 20, your opposition to reducing the base
26 differential to \$1.60. And I'm just trying to -- I know
27 it's in your testimony, but I want to make sure we're
28 clear about it.



1 And I take it, is this a proposal modification you
2 are offering or just information as to justify why it
3 shouldn't go to zero, or are you saying, I think it should
4 actually be increased?

5 A. I would say that it is an alternative proposal
6 within the scope of the hearing, that rather than reducing
7 it from \$1.60 to zero, we should consider increasing it
8 from \$1.60 to \$2.20, which lines up well with the minimum
9 differential proposed -- the de facto minimal differential
10 proposed by NMPF.

11 Q. Okay. So as you took on the three different
12 pieces of the differential, you put information to justify
13 increasing the Grade A incentive from \$0.40 to \$0.67?

14 A. Right.

15 Q. Okay. And that's based on some ERS cost of
16 production estimates which you linked in your statement to
17 say that that's a good proxy for saying what it costs now
18 to stay Grade A certified; is that correct?

19 A. That's a good proxy for the non- -- the sort of
20 non-feed production costs that are -- that are most
21 similar to the sort of things that are required to
22 maintain Grade A standards.

23 Q. Okay. And then for the balancing piece, you put
24 on information to increase from the current \$0.60 to
25 \$1.04. And I think part of what -- part of that increase
26 is based off a percentage increase related to the increase
27 in III and IV Make Allowances.

28 Am I reading that part correctly?



1 A. Yes.

2 Q. And then part of that is to account for additional
3 transportation costs to balance fluid plants?

4 A. Right.

5 Q. Because as I understood that Mr. English asked you
6 some questions about that, is we do acknowledge that the
7 model accounted for some transportation costs, as we just
8 discussed, the most efficient routes.

9 But you would argue there's additional
10 transportation on the balancing side of getting milk to
11 fluid plants when needed that's not accounted for, and
12 that is what these transportation costs would represent?

13 A. Right. I think it's apples and oranges. The
14 difference that the transportation costs go in to
15 calculating the difference among location, that there's an
16 underlying cost associated with delivering, moving, you
17 know, shifting from one group to another, shifting from
18 one location to another, and delivering distance supplies
19 for balancing.

20 Q. So, for example, as has been testified to at the
21 hearing, there's a lot of talk about how there's
22 stair-stepping of milk.

23 But in your example maybe -- so maybe the model
24 accounted for the stair-stepping, but in your example,
25 maybe that didn't occur in reality, and there was actually
26 additional transportation costs incurred?

27 A. Yeah. Balancing is different than the -- daily
28 and seasonal balancing is different from just a static



1 solution as generated by the dairy -- by the USDSS.

2 And I would say, as I tried to make clear in the
3 testimony, that as much as possible, I tried to follow the
4 logic of the original decision in 1998 that identified
5 \$1.60 as the minimum differential. I -- I tried as much
6 as possible to lay that out. In fact, I would not have
7 done this if there had not been a proposal to reduce it
8 from \$1.60 to zero, having opened the door to what that
9 level should be, and recognizing that there have been
10 increases in costs across the board, and that there's a
11 value to establishing a sufficient minimum Class I price
12 differential overall to the whole workings of the system.

13 We -- I did do that, and I did -- again, I did try
14 to follow the logic of the 1998 decision as much as
15 possible, because so much of what's going on in this
16 hearing is about simply taking the existing logic of the
17 Federal Order system and the order reform decision and
18 updating the numbers according to the same logic.

19 Q. And on the last piece, the incentive to serve
20 Class I customers, your sort of a proposal is to go to
21 \$0.60 to \$1.20. And you use Table 1 on the next page,
22 page 8, to compare the Class III prices, which are from
23 AMS, to the Grade A pay price in Minnesota and Wisconsin,
24 and you said those were NASS prices.

25 Did I catch that correctly?

26 A. Okay. Let me clarify that. So that -- that
27 highlighted sentence that -- that on page 8 that says,
28 "Altogether, increases in the foundation for these three



1 elements justify not a reduction of the Class I
2 differential, but an increase of approximately \$0.60."

3 I recognize that there is a negligible difference
4 between the -- and the incentive to serve Class I
5 customers following the same Table 7 logic from 1998
6 and -- and duplicating as much -- as closely as I could to
7 the same comparison for --

8 Q. Okay.

9 A. -- the '21 -- 2021 and 2022. So I am not
10 proposing -- we're not -- we're not suggesting that \$1.20
11 increase. We're suggesting a \$0.60 increase total, so --
12 and that includes no change in the last element --

13 Q. Okay.

14 A. -- the Class I -- incentive to serve Class I
15 customers only.

16 Q. Okay. I appreciate that clarification. Okay.

17 And -- and I think as I read, with that in mind,
18 that paragraph, then what you are talking about is,
19 according to you, USDA used premiums back in Minnesota and
20 Wisconsin to look for what it needed to incent milk to
21 Class I?

22 A. Right.

23 Q. And current premiums are less, but still above
24 \$0.60, so the \$0.60 is still appropriate?

25 A. Yeah, premiums in the sense that the -- that the
26 all-milk price in that state is above the Class III price.

27 Q. Right.

28 A. Yeah. That the all-milk price for fluid grade



1 milk is above the -- is above the Class III price. I
2 believe from my -- from reading into the -- everything I
3 could read into that discussion of Table 7 in the 1998
4 decision, I believe that that is -- that's what was done,
5 that there was a comparison of the fluid grade milk price
6 for Minnesota-Wisconsin to the -- to the Class III price.

7 Q. Bear with me one second.

8 A. Sure.

9 Q. I think that's it from AMS.

10 MS. TAYLOR: Thank you so much.

11 THE WITNESS: Thank you.

12 THE COURT: Dr. Cryan, is there any part of what
13 you want to emphasize that needs follow-up at this point?

14 THE WITNESS: I don't believe so, Your Honor. I
15 think I would just ask that these exhibits be whatever
16 officially whatever.

17 THE COURT: Is there any objection of the
18 admission into evidence of Exhibit 382?

19 There is none. Exhibit 382 is admitted into
20 evidence.

21 (Thereafter, Exhibit Number 382 was received
22 into evidence.)

23 THE COURT: Is there any objection to the
24 admission into evidence of Exhibit 383?

25 There is none. Exhibit 383 is admitted into
26 evidence.

27 (Thereafter, Exhibit Number 383 was received
28 into evidence.)



1 THE COURT: Is there any objection to the
2 admission into evidence of Exhibit 384?

3 There is none. Exhibit 384 is admitted into
4 evidence.

5 (Thereafter, Exhibit Number 384 was received
6 into evidence.)

7 THE COURT: Dr. Cryan, thank you.

8 THE WITNESS: Thank you.

9 THE COURT: What would happen if we broke for
10 lunch now, came back at 1:15, and who would then be
11 invited to testify? Dr. Capps?

12 All right, then. Thank you. Let's come back at
13 1:15.

14 We go off record at 12:14.

15 (Whereupon, the lunch break was taken.)

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1 THURSDAY, NOVEMBER 30, 2023 - - AFTERNOON SESSION

2 THE COURT: Let's go back on record.

3 We're back on record at 1:16.

4 Mr. Rosenbaum.

5 MR. ROSENBAUM: Yes, Your Honor. Before we have
6 our witness take the stand, I would like to go ahead and
7 mark the exhibits that we're going to be using during his
8 testimony.

9 THE COURT: Excellent.

10 MR. ROSENBAUM: And so let me start by handing
11 Your Honor a copy of IDFA Exhibit 52.

12 THE COURT: Yes. Now, the AMS already gave me six
13 different exhibits. I don't have the exhibit numbers on
14 them, but they have got the stickers.

15 MR. ROSENBAUM: All right. Your Honor, the first
16 document is, as I said, IDFA Exhibit 52, which we would
17 like to have marked with the next Hearing Exhibit number,
18 please.

19 THE COURT: I believe that's 386 is
20 IDFA Exhibit 52. 386.

21 (Thereafter, Exhibit Number 386 was marked
22 for identification.)

23 MR. ROSENBAUM: All right. And then the next
24 document we would like to have marked is the one you have
25 I, think, in front of Your Honor. I think it says
26 IDFA Exhibit 53. It's a little difficult to read, but let
27 me hand out that one.

28 THE COURT: Very good. I'm marking that as 387.



1 387 is IDFA Exhibit 53. Looks like this (indicating).

2 (Thereafter, Exhibit Number 387 was marked
3 for identification.)

4 THE COURT: All right. And then the next one.

5 MR. ROSENBAUM: Actually, Your Honor, the next one
6 is one that I'm only giving to USDA now, so you wouldn't
7 have a copy yet.

8 THE COURT: Okay.

9 MR. ROSENBAUM: It's the one that's called
10 Abridged Curriculum Vitae.

11 THE COURT: All right.

12 MR. ROSENBAUM: And I'll hand Your Honor a copy.

13 THE COURT: Thank you very much. So I'm marking
14 that as 388. Exhibit 388 is Abridged Curriculum Vitae as
15 of March 19, 2022, of Oral Capps, Jr.

16 (Thereafter, Exhibit Number 388 was marked
17 for identification.)

18 MR. ROSENBAUM: And then the next one, Your Honor,
19 is the document that's an Analysis of U.S. Dairy and
20 Nondairy Milk Demand.

21 THE COURT: All right. I have that.

22 MR. ROSENBAUM: And, actually, I think the
23 Curriculum Vitae I should probably go ahead and mark as
24 IDFA Exhibit 54, along with it being Hearing Exhibit 388.

25 THE COURT: IDFA Exhibit 54 is Exhibit 388, the
26 Curriculum Vitae.

27 MR. ROSENBAUM: And then -- and then Analysis of
28 U.S. Dairy and Nondairy Milk Demand, I would ask that that



1 be marked as IDFA-55, as well as the next Hearing Exhibit
2 the number.

3 THE COURT: All right. That next number is 389.
4 Exhibit 389 is also IDFA-55.

5 (Thereafter, Exhibit Number 389 was marked
6 for identification.)

7 MR. ROSENBAUM: And then the last document that
8 I'm having marked would be the document, the article, "I
9 Say Milk, You Say Mylk."

10 THE COURT: Yes. I can't wait until we get to
11 that one. That sounds great.

12 MR. ROSENBAUM: Which apparently there's a
13 long-running joke among economists with similar titles to
14 these kinds of studies.

15 And in any event, this is IDFA Exhibit 56, and
16 that would be, I think, Hearing Exhibit 390.

17 THE COURT: That's correct. IDFA-56 is
18 Exhibit 390, "I Say Milk, You Say Mylk," spelled M-Y-L-K.
19 All right.

20 (Thereafter, Exhibit Number 390 was marked
21 for identification.)

22 THE COURT: And I still have three more exhibits,
23 but you are not dealing with those at this time,
24 Mr. Rosenbaum?

25 MR. ROSENBAUM: Those are not my exhibits, Your
26 Honor.

27 THE COURT: All right. Very good.

28 MR. ROSENBAUM: And at this point then, I would



1 like to call Dr. Oral Capps to the witness stand, and I
2 would ask that the -- well, start with that.

3 THE COURT: All right. Dr. Capps, if you will
4 make yourself comfortable.

5 Now, is that leftover water from Dr. Cryan?

6 THE WITNESS: I just brought it. It's fresh.

7 THE COURT: Oh, good. Very good. I'm glad.

8 Now, you may wonder what the purpose of the ruler
9 and the yardstick are. It may become evident as we go
10 forward.

11 Would you state and spell your name?

12 THE WITNESS: Oral Capps, Jr., O-R-A-L, C-A-P-P-S,
13 suffix J-R.

14 THE COURT: Have you previously testified in this
15 proceeding?

16 THE WITNESS: I have not.

17 THE COURT: I'd like to swear you in.

18 ORAL CAPPS, JR.,

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

21 THE COURT: Thank you.

22 Now, if you need to adjust the position of the
23 mic, you can move the base of it.

24 THE WITNESS: That will be fine. Can everyone
25 hear me?

26 THE COURT: Actually, yes.

27 THE WITNESS: Good.

28 THE COURT: Surprises me. You are quite a ways



1 from the microphone. Very good.

2 And it will depend on whether you like your papers
3 to the left of the laptop, to the right of the laptop, you
4 might have to make adjustments as we go.

5 DIRECT EXAMINATION

6 BY MR. ROSENBAUM:

7 Q. Good afternoon, Dr. Capps.

8 Can you please introduce yourself by telling us
9 where you work and what you do there.

10 A. I -- I'm an executive professor and regents
11 professor in the Department of Agricultural Economics at
12 Texas A&M University. Been there since 1986, so I have
13 had a long tenure at Texas A&M.

14 Q. And start with telling us what your educational
15 background is, please.

16 A. My educational background was all about the 1970s.
17 From 1971 to 1979, I got four degrees from Virginia Tech.
18 It was once called Virginia Polytechnic Institute & State
19 University. I have a degree in mathematics, a degree in
20 statistics, a master's degree in ag economics, a Ph.D.
21 degree in ag economics.

22 Q. And tell us what kind of things you have worked on
23 and taught in your career.

24 A. Over my 40-plus career I'm an ag economist, but
25 principally my area is demand and price analysis. I'm a
26 marketing economist. I also am a quantitative analyst,
27 marketing analyst. I do a lot with applied econometrics.

28 Q. And do you -- in addition to teaching, do you do



1 consulting as well?

2 A. I run a center at Texas A&M, I guess I failed to
3 mention that. But the center I run since 2009, I'm a
4 co-director. It's called the Agribusiness Food and
5 Consumer Economics Research Center, or we like to use the
6 acronym AFCERC.

7 So it's an interesting center in the sense that we
8 operate like a consulting firm, but within academia. So
9 we have government contracts, or private sector contracts
10 through the center at times, because of FOIA requests or
11 just the fact that the project couldn't be done in a --
12 it's too short to be done by the time you get through all
13 the paperwork going through the university, at that time I
14 do act as a consultant.

15 And I have an outside business consulting company
16 called Forecasting and Business Analytics, LLC, that was
17 formed in 2001.

18 THE COURT: Would you tell me the letters that you
19 referred to for the Texas A&M Research Center?

20 THE WITNESS: Yes. AFCERC, Agribusiness Food and
21 Consumer Economics Research Center.

22 BY MR. ROSENBAUM:

23 Q. And are you a certified business economist?

24 A. I'm a certified business economist by the National
25 Business Economics Association.

26 Q. And by your training and practical experience, do
27 you consider yourself to be an expert in agricultural
28 economics and statistics?



1 A. Yes.

2 Q. And I think you also mentioned marketing
3 economics; is that right?

4 A. Yes.

5 Q. And demand and price analysis, correct?

6 A. Yes.

7 Q. And we're going to be talking today about
8 elasticities, correct? You are going to be talking today
9 about also elasticities, correct?

10 A. Yes.

11 Q. I'll be listening.

12 And is that a technique that's used in the context
13 of demand and price analysis?

14 A. Absolutely. It's one of the cornerstones of
15 microeconomics as well.

16 Q. Okay. And how about applied econometrics, do you
17 do that as well?

18 A. In order to measure the own-price elasticities,
19 one needs to develop econometric models, and that's where
20 the applied econometrics comes into play.

21 MR. ROSENBAUM: Your Honor, at this point I would
22 ask that Dr. Capps be recognized as an expert in
23 agricultural economics and statistics, in marketing
24 economics, in applied econometrics, and in demand and
25 price analysis.

26 THE COURT: Is there any objection?

27 There is none. Dr. Capps, listen carefully
28 because you may have to help me. I find you to be an



1 expert in a number of fields, including: Economics --
2 agricultural economics and statistics, marketing
3 economics, applied economics, and demand and price
4 analysis.

5 THE WITNESS: I would amend one word, Your Honor.
6 Applied econometrics.

7 THE COURT: Econometrics.

8 THE WITNESS: Yes, ma'am.

9 THE COURT: Econometrics. Thank you.

10 BY MR. ROSENBAUM:

11 Q. So, Dr. Capps, have you done price elasticity
12 studies over the years?

13 A. Many of them.

14 Q. Okay. And have you done them both as an
15 academician and also as a consultant to the private
16 business?

17 A. Yes.

18 Q. Give me an example of what a private business
19 might ask you to take a look at, for example.

20 A. Well, you know, we -- let's talk about the private
21 sector. Done a lot of work involving -- for Kellogg's,
22 and they were interested in looking at demands for their
23 various products. And they were asking us to do a case
24 study if there would be cannibalism between phytosterols
25 in orange juice in a product called Heart Wise versus the
26 regular Minute Maid orange juice, because they were
27 contemplating -- and I'm not sure where they -- what they
28 actually did, but they were contemplating the use of



1 phytosterols in some of their products.

2 Well, that work allowed us to take a look at
3 measurement of elasticities and cross-price elasticities
4 that I will define in my presentation for Tropicana,
5 Minute Maid, the two Minute Maid products, Florida's
6 Natural, and other orange juices.

7 Q. Okay.

8 A. That's one example.

9 Interestingly enough, another example is not
10 related to agricultural economics, but Mary Kay Cosmetics
11 sold many -- still does -- items. They wanted to develop
12 optimal pricing strategies which required the use of
13 own-price elasticities and cross-price elasticities for a
14 large number of their products. I was able to do that.
15 Not able to publish it, highly proprietary, but that's
16 another example.

17 And more recently looking at brands of yogurt,
18 Chobani, Yoplait, Dannon, and other types of yogurt.

19 Q. Dr. Capps, is Hearing Exhibit 386 your written
20 testimony in this hearing?

21 A. It is.

22 Q. And is -- is Hearing Exhibit 387 the PowerPoint
23 presentation that you will use today to take us through
24 the major highpoints of that written testimony?

25 A. Yes.

26 Q. Okay. If we could please put the PowerPoint up,
27 and please proceed, Dr. Capps.

28 A. Thank you very much. I'll -- even though there's



1 many words on the slide, I just use that as a talking
2 point, so we'll see how this goes.

3 First of all, and I don't mean to insult anybody's
4 intelligence, but since we're talking about the notion of
5 own-price elasticity, probably be best that we define it.

6 And I think you have had other testimony where
7 people have done it, but for the sake of repetition,
8 own-price elasticity: The percentage change in quantity
9 of a product divided by the percentage change in the price
10 of milk.

11 When you get this measure, what that means is for
12 every 1% change in price, what is going to be the
13 corresponding percentage change in the quantity of that
14 product, here referred to as milk. The reason economists
15 like this, it's a unitless measure, and it's, you know,
16 related to percentage changes, which in business
17 applications makes it a lot easier to understand.

18 And as far as signs go, it should be negative, the
19 own-price elasticity.

20 I mentioned the fact that it's unitless, but
21 there's three broad measures that economists, once they
22 have the own-price elasticity, could determine the
23 character of the demand for the product.

24 If an absolute value, the own-price elasticity
25 exceeds one, we call that an elastic demand. But to
26 translate that, that means the product is sensitive to
27 changes in price.

28 On the other hand, if the own-price elasticity and



1 absolute value is less than one, we call that demand for a
2 product inelastic. Still sensitive, but not sensitive in
3 general to changes in price.

4 And if by chance the own-price elasticity were
5 equal to one, we would characterize that product as the
6 demand for it as unitary elastic.

7 THE COURT: May I interrupt just a moment.
8 Unitless, just so that that's clear in the record, spell
9 that.

10 THE WITNESS: Unitless, U-N-I-T-L-E-S-S.

11 THE COURT: All right. And so the beauty of that
12 is we don't have to deal with hundredweight or pounds or
13 tons or anything like that.

14 THE WITNESS: Spot on, Your Honor.

15 THE COURT: All right. Thank you.

16 BY MR. ROSENBAUM:

17 Q. And just to make sure we're all on the same page,
18 it's a product is elastic if a 1% change in price results
19 in a greater than 1% change in the amount and the quantity
20 sold, correct?

21 A. Correct.

22 Q. Okay. Please continue.

23 A. Now, to provide background on my testimony today,
24 one of the key things when it comes to milk is the
25 emergence of plant-based milk alternatives. I'll use that
26 phrase a lot, and maybe to shorten my words, I may use the
27 acronym PBMA, plant-based milk alternatives.

28 And as you can see here on the screen, based on



1 data that we were made available to me by Circana, which
2 used to be called Information Resources, Inc., and you can
3 see clearly that during various periods, the market share
4 for plant-based alternatives has increased from 7.75% in
5 the pre-pandemic period. Over the period of June 28th,
6 2020, to May 15, 10.3%. And then after that time --

7 THE COURT: To May 15 of what year?

8 THE WITNESS: 2022.

9 THE COURT: Thank you.

10 THE WITNESS: And there is a typo on the last one,
11 it should be March 22 -- or the May 15 should be March 15,
12 2022. My bad, Your Honor.

13 MR. ROSENBAUM: So -- and that's the middle?

14 THE WITNESS: The middle. It should be March 15,
15 2022.

16 MR. ROSENBAUM: Okay. Your Honor, if we could
17 have that corrected.

18 THE COURT: Yes.

19 THE WITNESS: It's amazing. You go through these
20 presentations, you think you got all the errors, but just
21 to be clear.

22 THE COURT: So give me just a minute. We're in
23 Exhibit 387. We're on page 4. We have gone to the middle
24 blue rectangle. We're going to change the second date
25 there that now says "May 15, 2022," going to change that
26 to "March 15." Just all we're changing is May to March.

27 MR. ROSENBAUM: Exactly, Your Honor.

28 THE WITNESS: Correct.



1 THE COURT: All right. We're now doing that.

2 THE WITNESS: So what's the major takeaway? The
3 major takeaway is that plant-based milk alternatives are a
4 player in the market associated with milk products.

5 So in my analysis I was asked to talk about the
6 own-price elasticity for fluid milk. Pretty complicated
7 concept in the sense that if one were to take a stroll
8 through the grocery store and go to the dairy aisle -- and
9 I do that on a weekly basis because I'm the principal food
10 shopper in my family -- if you go to the dairy category,
11 what do you see? You see traditional white milk. You see
12 traditional flavored milk -- or at least I do -- organic
13 milk, lactose-free milk, health-enhanced milk, and --

14 THE COURT: What was that one?

15 THE WITNESS: Health-enhanced milk.

16 THE COURT: Health-enhanced?

17 THE WITNESS: Fairlife may be a good example of
18 that. Okay?

19 So the disaggregation of the fluid milk category
20 to me captures clearly what consumers face when shopping
21 at retail outlets, but also you see these plant-based milk
22 alternatives that I just described.

23 And in my analysis, rather than focusing on
24 individual plant-based milk alternatives, I aggregated
25 them. We had the data to do those. So we have a
26 plant-based milk alternative category, which consists of,
27 as you see here, almond, oat, cashew, coconut, rice, and
28 soy.



1 But at the same time, other studies have shown,
2 including some of my own, that you may also have other
3 competitors to milk, milk being more than just a thirst
4 quencher. Bottled water, refrigerated juices and drinks,
5 and self-stable bottled juices, sport drinks, refrigerated
6 yogurt, because yogurt often we have consumers perhaps
7 using yogurt as a breakfast instead of milk in the cereal,
8 and protein beverages, something like Muscle Milk.

9 So my analysis, bottom line, consists of 11
10 commodities for which I want to examine their demand
11 interrelationships.

12 Now, as I point out here, I'm not going to spend
13 much time on this. My testimony centers only on the U.S.
14 However, I have done studies broken down by the eight
15 Circana regional markets. The takeaway there is, there
16 are commonalities between the national market and the
17 regional market. There are some differences, but
18 altogether a very similar type analyses.

19 So my testimony is only going to concentrate on
20 the U.S., just as many of the studies that had been
21 reported when own-price elasticities were estimated, they
22 also concentrated on the national market.

23 THE COURT: So just for the record, when you
24 mentioned Circana, C-I-R-C-A-N-A, what is that?

25 THE WITNESS: It's a third-party vendor of
26 standard data that supermarkets supply to the third market
27 vendor. The -- another vendor you may have heard, Nielsen
28 is a vendor. But these data came from Circana, formerly



1 known as IRI, Information Resources, Inc.

2 BY MR. ROSENBAUM:

3 Q. And from that, can you get actual sales data for
4 products in terms of their price and quantity sold?

5 A. Yes. In fact, working with scanner data is like
6 taking a drink from a fire hydrant. I mean you are just
7 inundated with information.

8 Q. Please continue.

9 A. Yes. So based on that, my research focuses on a
10 granular array of not only fluid milk product segments,
11 but also various alternatives. The -- and in doing that,
12 not only do we -- are able to estimate own-price
13 elasticities, which is the main course for this testimony,
14 but importantly, you also get information about how the
15 quantity in question could be affected by percentage
16 changes in other prices, and that's called a cross-price
17 elasticity.

18 Why would you examine cross-price elasticities?
19 Good question. The reason you would is to be able to
20 ascertain if the products together may be labeled as
21 competitors or substitutes or complements -- complements
22 with an E as opposed to an I. And complements meaning the
23 products are purchased together. And as a result of that,
24 not only do we have this granular array, but we also
25 consider the pandemic.

26 In fact, the way this study was done, using the
27 weekly data from Circana, and basically for these 11
28 products that I mentioned, data were provided on volume



1 dollar sales, average price per volume, total points of
2 distribution. And these are weekly. And if you will
3 note, the time period January 8, 2017 to August 13, 2023.

4 And in order to discern the impact of the COVID-19
5 pandemic on the own-price elasticities, as well as on the
6 cross-price elasticities, I divided the lengthy dataset
7 into three periods. The first period, clearly pre-COVID,
8 January 8, 2017 to March 15, 2020. There's always some
9 discussion in the literature, when -- where do you draw
10 the line about pre-pandemic and then pandemic.

11 And you can see -- and if you can read the fine
12 print. I'd be impressed with your eyesight. But another
13 study developed by Zhao, Wang, Hu, and Zheng in 2022, that
14 was their cutoff for weekly data. They weren't examining
15 dairy products, they were examining meat products.

16 Then we have the COVID-affected period in red.

17 And then for lack of a better term, the
18 moving-past-COVID period, May 22 of 2022 to August 13,
19 2023.

20 And once again, Your Honor, that May 15 should be
21 March 15, 2022.

22 THE COURT: All right. So I'm on page -- oh, I'm
23 on the slide that says --

24 THE WITNESS: Oh, no. Forget what I said. I'm
25 wrong. What is -- what is put here is correct. It is
26 correct.

27 THE COURT: Okay. Good.

28 THE WITNESS: My bad.



1 THE COURT: No, you're good.

2 THE WITNESS: I'm good so far.

3 THE COURT: Yeah.

4 Now, I'm just going to ask you to spell, in the
5 fine print, where you cited these other studies, would you
6 just give the court reporter the spelling of the Zhao,
7 Wang.

8 THE WITNESS: Zhao, Z-H-A-O; Wang, W-A-N-G; Hu,
9 H-U; and Zheng, Z-H-E-N-G, 2022.

10 THE COURT: Thank you.

11 THE WITNESS: Just wanted to demonstrate that
12 there was no cavalier approach in breaking these periods.
13 I think they appeal to one's intuition. And the whole
14 purpose of that, once again, is to examine the impact of
15 the pandemic on the -- on the set of elasticities that I'm
16 going to share with you.

17 BY MR. ROSENBAUM:

18 Q. Please continue.

19 A. Okay. Now, you have already heard several times
20 that I'm relying on data procured from Circana. So the
21 question is, well, what coverage does Circana -- or even
22 Nielsen, same issue -- and based on information that I
23 received from Prime Consulting, May 2023, the syndicated
24 retail data that I'm using constitutes about 64% of milk
25 volume.

26 So what's the remaining 36% attributed to?
27 Untracked retail, which is 12%. To give you an example of
28 that, H-E-B is a prominent grocery store in the state of



1 Texas, headquartered in San Antonio. Very dominant in the
2 state. They do not report data to Circana. They do not
3 report data to IRI. And at times, other retailers fall
4 into that same category, so that's where the 12% comes
5 into play.

6 Does not cover foodservice. Does not cover
7 schools. And these aren't my -- these are my words, but
8 they came from the Prime Consulting report, "shrink or
9 other."

10 So bottom line, what does that mean? The coverage
11 that we're getting regarding milk volume is about 76%.
12 Okay? And the foodservice category encompasses limited
13 service restaurants, full service restaurants, and
14 colleges, universities, long-term care, et cetera,
15 et cetera.

16 So what is my approach? Well, you already have
17 heard that I'm interested in those 11 products, the fluid
18 milk being disaggregated into the five segments that I
19 mentioned. But we're also including juices, which is the
20 aggregate of shelf-stable bottled juices and refrigerated
21 juices, bottled waters, sports drinks, PBMA, plant-based
22 milk alternatives, and refrigerated yogurt.

23 Now, this work or my approach here is consistent
24 with previous works where demands were estimated by Zhen,
25 et al., Z-H-E-N, in 2014. And looking at 23 foods and
26 beverages, again, using weekly scanner data just as I do,
27 and their interest covered, for example -- I'm not going
28 to list all 23 products -- but particularly for us, whole



1 milk and lower fat milks.

2 Additionally, another study in 2018 by Heng
3 estimated the demand system for 15 beverages, including
4 plain and fluid milk, once again, using weekly data.

5 So the notion of considering 11 products that I
6 tried to justify is not farfetched. It's supported by the
7 literature. And technically, the demand system, to
8 capture these interrelationships, meaning you are going to
9 have more than one equation to take a look at. Previous
10 studies, many of them in the literature, look at one
11 equation for fluid milk. Well, we have 11 equations.

12 And the system technically is known as the Barten
13 Synthetic Demand Systems Model developed by Anton Barten
14 from Rotterdam in 1993. I've used this model quite a bit,
15 especially dealing with the weekly time series that I'm
16 having.

17 And you might ask why. Well, it's a general
18 representation of four major other demand systems. Those
19 being something called an Almost Ideal Demand System, or
20 AIDS model; another model called the Rotterdam Model;
21 another model called the Central Bureau of Systems Model,
22 or CBS Model; and one more, the National Bureau of
23 Research Model, NBR.

24 So based on two parameters in that model, I can
25 tell whether or not I have a general model, or maybe my
26 model actually boils down to one of the four that I
27 mentioned. So I like that because of its flexibility.
28 Also, the model is predicated on log differences and



1 quantities and prices. And not to be too technical, that
2 allows us to be working with data that are what
3 statisticians would call stationary. In other words, the
4 mean and variance do not change through time. That's a
5 desirable attribute. It's not a requirement.

6 And then as I mentioned, I'm going to develop
7 these own-price elasticities for the three distinct
8 products.

9 THE COURT: Now, let me interrupt you. I'm on
10 page 11. Are you?

11 THE WITNESS: Yes.

12 THE COURT: And Barten is spelled how?

13 THE WITNESS: B-A-R-T-E-N.

14 THE COURT: All right. And did you mean three
15 products or three periods?

16 THE WITNESS: The own-price elasticities are
17 derived for three periods.

18 THE COURT: Thank you.

19 THE WITNESS: There's 11 products, but that means
20 there's going to be an 11-equation system for each of the
21 three periods that I specified.

22 So in looking at presentations, unless you're me
23 and really like looking at numbers -- most people don't, I
24 understand, so I try to give you a pictorial view of what
25 the own-price elasticities look like, associated with each
26 of the 11 products by the three periods.

27 Putting myself in your shoes, my eyes would go to
28 the fluid milk category. So if you look at traditional



1 white milk, which is still the 400-pound gorilla when it
2 comes to fluid milk, look at the own-price elasticities:
3 Negative .77, yes, inelastic in the pre-COVID period;
4 negative .3 in the COVID period; and then as we move past
5 COVID, it becomes elastic, negative 1.4.

6 And if you look at organic and health-enhanced,
7 I'm not going to read the numbers, but the own-price
8 elasticities increase.

9 If you look at traditional flavored milk -- and by
10 the way, the literature has established that traditional
11 flavored milk should be elastic. I found that in the
12 pre-pandemic period and the COVID period, but
13 interestingly in the moving-past-COVID period, it became
14 inelastic. I have to be honest and say that is a bit of a
15 surprise.

16 Lactose-free milk, all over the place: Highly
17 inelastic pre-COVID; very elastic during COVID; and then
18 still elastic, but not as sizeable.

19 Now, you may also be interested in the total milk
20 category, so in order to make comparisons with previous
21 studies. And I'll point out a comparison with Dr. Kaiser
22 in particular. I developed a seven-equation system that
23 has still for six products, everything you see to the
24 right of fluid milk: Juices, bottled water, sports
25 drinks, et cetera.

26 And then I aggregated the five segments into total
27 milk. And, again, the principal reason for doing that,
28 there aren't any studies that look at this granular array



1 of products, but many studies have looked at the total
2 fluid milk category. So I asked myself, well, what would
3 happen if we just considered total milk but still keep the
4 competitors here, or other products in the demand system?

5 And as you see for total milk, my own-price
6 elasticity: In the pre-COVID period, negative 1.1; in the
7 pandemic period, negative .58; and then in the
8 moving-past-COVID period, negative 1.26.

9 BY MR. ROSENBAUM:

10 Q. And just to clarify, that means that a 1% change
11 in the price of total milk results in a 1.26% change in
12 the amount of --

13 A. Amount of milk purchased.

14 Q. Thank you.

15 A. In the moving-past-COVID period.

16 Q. Yes. Thank you.

17 A. Right.

18 THE COURT: Excuse me just a second.

19 THE WITNESS: Right. And even if you looked at
20 negative --

21 THE COURT: You say "results in." Am I seeing
22 that the change in price results in the purchases or is it
23 just correlated?

24 THE WITNESS: A -- technically a 1% change in
25 price leads to a 1.26% change, corresponding change, in
26 the quantity.

27 Let's put this in perspective here, because it's
28 hard to sometimes for people to think about percent



1 changes. And I'll just make an assumption here. Let's
2 suppose a gallon of milk costs \$3, just for purposes. And
3 let's suppose that price is going to rise to \$3.30.
4 That's a 10% increase in price. So everything else the
5 same, as economists are often using, what that means, if
6 the own-price elasticity is negative 1.26, now the
7 percentage change in quantity is 12.6% owing to that 10%
8 increase in the price of milk.

9 THE COURT: Thank you.

10 THE WITNESS: That's -- that's the interpretation,
11 if you will, Your Honor, of the own-price elasticity.

12 THE COURT: Thank you.

13 BY MR. ROSENBAUM:

14 Q. Please continue.

15 A. And I mentioned a number of these things already.
16 One thing I will emphasize, the own-price elasticities are
17 not uniform across the three perspective periods. And the
18 other statements on the page here I have already mentioned
19 verbally, and I don't want to take your time.

20 Now, you might ask, well, it's just an artifact of
21 my model. Well, there are other -- in fact, interestingly
22 enough, in 2023, this year, publications came out, one of
23 which was in the Journal of Agricultural and Resource
24 Economics by Ghazaryan, Bonanno, and Carlson. Carlson is
25 from the Economic Research Service.

26 They also used weekly data from IRI, because
27 during the time of their study, IRI hadn't changed its
28 name. And they used a different demand system than I,



1 Exact Affine Stone Index Demand System technically is what
2 it's called.

3 But the bottom line is, they estimated own-price
4 elasticities for skim milk, reduced fat milk, and whole
5 milk. And if you will notice, I have bolded those
6 own-price elasticities, they are all greater than one in
7 absolute value, meaning they are elastic. Results were
8 very similar to what I got.

9 In another study, I don't think it was published,
10 it's a working paper out of Purdue University, but this
11 time using data from Nielsen, Son and Jason Lusk, both
12 prominent ag economists in our profession, estimated the
13 own-price elasticity for regular dairy milk, regular dairy
14 milk, to be negative .95, and for lactose-free milk,
15 negative 1.39, which are values, especially in the
16 moving-past period, similar to what I have.

17 Q. And just to make clear, these are the -- these two
18 studies have -- are the documents that have been marked as
19 Hearing Exhibits 389 and 390?

20 A. Right.

21 Q. And just to make clear, the work by Ghazaryan,
22 G-H-A-Z-A-R-Y-A-N, that included an associate professor at
23 Colorado State University; is that correct?

24 A. Yes.

25 Q. And Andrea Carlson, just to be clear, is at the
26 Economic Research Service of USDA, correct?

27 A. Correct.

28 Q. And the study -- the other study by Son, S-O-N,



1 and Lusk, L-U-S-K -- Lusk is -- well, was at the time of
2 the publication, which was only June of -- which is June
3 of this year, was the head of the Agricultural Economics
4 at Purdue University, correct?

5 A. Right now he's the dean of the College of
6 Agriculture at Oklahoma State University.

7 Q. Please continue.

8 THE COURT: Before you do, where these names are
9 shown is on page 14 of 387.

10 Did you say Carson or Carlson?

11 THE WITNESS: Carlson.

12 THE COURT: Thank you.

13 THE WITNESS: And the other point I would add on
14 this page, you know, Andrea Carlson and Jason Lusk are
15 prominent ag economists in the profession.

16 Now, so what are the major takeaways of my
17 analysis? Trying to be clear and offer maybe additional
18 light into why we got the results that we did.
19 Fundamental economic principle is that when it comes to
20 own-price elasticity, the greater the number of
21 substitutes for any product, the greater the magnitude of
22 the own-price elasticity.

23 Over my 40-year career, I have -- even in my own
24 empirical work and others that I have either reviewed or
25 participated in, I have never seen anything to refute this
26 statement. So what do I mean by substitutes? Well, the
27 number one substitute for any fluid milk product, even
28 total milk, number one, bottled water. If you look at



1 sports drinks, also a substitute. If you look at
2 refrigerated yogurt, also a substitute.

3 And then, since we have broken down fluid milk
4 into those five segments, you have substitutability there
5 between traditional white milk and organic milk, and
6 traditional white milk and health-enhanced milk. So the
7 point is, we have a number of substitutes. How do we know
8 we have a number of substitutes? Although I don't --
9 haven't shown that information here, that's why I talked
10 about cross-price elasticities.

11 And based on those substitution relationships,
12 that explains, in part, why my own-price elasticity
13 estimates that are reported are elastic, consistent with
14 this principle. Or, you know, the point is, own-price
15 elasticity is a positive and direct function of a number
16 of substitutes.

17 And even if I combined fluid milk into a total
18 category, as I mentioned before, we still see elastic
19 responses in the pre-COVID period and the moving-past
20 period. So that would suggest my results are at odds with
21 the conventional wisdom in the literature revealing the
22 fact that the demand for total milk was elastic,
23 especially in the moving-past-COVID period.

24 Another takeaway, because of the pandemic, there
25 was indeed a structural shift in the demand for fluid
26 milk. I think it was obvious. No need to statistically
27 test for it, although you could.

28 Another important point I want to emphasize here,



1 the two studies that were brought into play by
2 Mr. Rosenbaum that I relied on to justify my results, the
3 commonality was that weekly data were used -- weekly.
4 There is a reason why we like to use weekly data. As I
5 was saying, presumably consumers shop at retail outlets on
6 a weekly basis rather than on a monthly, quarterly, annual
7 basis, especially for milk and beverages. And in my view,
8 the own-price elasticity based on weekly data represent a
9 more realistic picture of the frequency of consumer
10 shopping behavior.

11 Another fine point here is that elasticities that
12 are based on shorter time frequencies are likely to be
13 greater in magnitude than elasticities based on
14 longer-term frequencies. There can be some differences
15 there, but I have offered supporting documentation for
16 that particular point.

17 Now, maybe to make the analysis come alive here a
18 little bit, what I have done in my testimony is made a
19 comparison provided by Dr. Harry Kaiser at Cornell, and
20 based on Dr. Kaiser's testimony, here's what I took as a
21 given: The National Milk Producers Federation proposal
22 recommending increasing the Class I price by 8.6%. No
23 challenge. A given. I also am not challenging the
24 elasticity of price transmission from the farm level to
25 the retail level to be close to .55% as calculated by
26 Dr. Kaiser.

27 Now, you might want -- ask yourself, why do I need
28 these two pieces of information? The 8.6% is the price



1 increase at the farm level. But in order to use the
2 elasticities that I have generated, which are at the
3 retail level, you are going to have to translate that
4 percentage change in farm price to a corresponding
5 percentage change in retail price. If you were to
6 multiply the 8.6% by the .55%, that's where Dr. Kaiser
7 suggests results in a 4.72% increase in the retail price
8 for milk that, based on the 8.6% increase, the proposal.

9 And what the elasticity of price transmission
10 denotes is another percentage change, but the percentage
11 change in the retail price due to 1% change in the farm
12 price.

13 So by the chain rule, if you wanted to be
14 technical, multiplying those together gives us that
15 8.6% farm price increase, translating into a 4.72%
16 increase in the retail price of milk.

17 BY MR. ROSENBAUM:

18 Q. And just to clarify, at this point, you and
19 Dr. Kaiser are using the same numbers --

20 A. Same numbers.

21 Q. -- this far in your calculations?

22 A. Yes, sir.

23 Q. So now let's take it to the bottom half of that
24 page 18.

25 A. Right. More hand waving here -- or mathematics,
26 my apology -- but my products are not just a retail price
27 of milk, although I have an aggregate category for milk.

28 So the question is: How do I translate further



1 that percentage change in the retail price of milk into
2 the corresponding percentage change in the retail price
3 for traditional white milk, organic milk, traditional
4 flavored milk, lactose-free milk, and health-enhanced
5 milk? To do that -- and the testimony here offers the
6 details.

7 Q. You are pointing to Exhibit 386.

8 A. Yes, I'm sorry. Yes. You want me to give the
9 page number?

10 Q. No, that's fine.

11 A. Okay. What I did is regressed the retail price of
12 these five segments each as a function of the retail
13 price. So at the end of the day I further got that 8.6%,
14 which is a trigger, to give us ultimately at the retail
15 level, the percentage changes in the traditional white
16 milk, flavored milk, and the other segments.

17 What's the end result? The end result you see is
18 a 6.28% decrease in the quantity purchased of white milk,
19 2.4% decrease in the quantity purchased of traditional
20 flavored milk, 4.11% decrease in the purchase of organic
21 milk, 2.75% decrease in the quantity purchased of
22 lactose-free milk, and then finally, and maybe mercifully,
23 5.6% decrease in the quantity purchased of health-enhanced
24 milk.

25 So owing to the fact that we still have -- owing
26 to the fact that in the moving-past period, to be clear,
27 because of -- except for traditional flavored milk, all
28 the own-price elasticities were elastic, and that's why it



1 may surprise you to see such a percentage decrease in all
2 the other milks as a result of my work.

3 But now let's go further and make a comparison
4 directly to Harry Kaiser. Okay? He didn't break down
5 fluid milk into the five categories; he just considered
6 the category fluid milk. And if I were to do that, his
7 4.72% increase in price translates into almost a 6%
8 decline in quantity purchased. And Dr. Kaiser's
9 elasticities were negative .2 or negative .3. My
10 own-price elasticity in the moving-past-COVID period,
11 negative 1.26, much higher than Kaiser's calculations that
12 were based on an average retail price elasticity from his
13 literature review.

14 So he suggested that, based on his own-price
15 elasticities, clearly in the inelastic range, the quantity
16 of milk purchased would decline by 1.66% or by .95%.
17 Notice mine is almost 6%.

18 Now -- and then based on my analysis even further,
19 the 8.6% increase in Class I price would still lead to an
20 increase in gross revenue for dairy farmers, because you
21 have a higher price and the, remember the percentage
22 change in quantity was almost 6%, but the price increase
23 was 8.6%.

24 So in terms of gross revenue for dairy farmers,
25 you still see an increase in gross revenues by about 2%,
26 but that's much lower than the, you know, 6.8 to 7.6%
27 increase in gross revenue for dairy farmers.

28 Q. Let me just interject a question here, which is,



1 obviously, you're projecting a roughly 6% decline in fluid
2 milk sales as a result of the proposed price increase,
3 correct?

4 A. I am.

5 Q. Now, that milk no longer being sold as fluid milk
6 would have to find a home somewhere else or be dumped,
7 correct?

8 A. There -- yeah, I would suppose that's the case.
9 And there are many possibilities as to what to do with
10 that.

11 Q. One possibility is that milk would go into what's
12 generally thought of as the marketing clearing product,
13 which is Class IV, nonfat dry milk.

14 Now, have you performed any analysis at all as to
15 what impact that extra milk ending up in nonfat dry milk
16 would have on the price of nonfat dry milk?

17 A. I haven't. I haven't considered Class II,
18 Class III, or Class IV prices.

19 Q. Those -- would those be logical considerations for
20 someone to think about when considering what the impact
21 would be of this kind of decline?

22 A. There would. I might also add, what about the
23 export market as a possibility? In previous ag policies,
24 there was a public law, PL 480, where surplus commodities,
25 not all of which were dairy, were used as giveaway for
26 other countries. We also have the food and nutrition
27 service SNAP program and WIC program. Perhaps there could
28 be a donation of the surplus milk there. So that's what I



1 was saying, is there's many possibilities.

2 But you are, right, Mr. Rosenbaum, I did not
3 consider anything but the impacts on Class I price.

4 Q. If you could continue on, please.

5 A. So -- and regarding the pandemic, aside from the
6 previous study that the judge asked me to spell everyone's
7 name, they worked on plant-based meat alternatives to
8 beef, chicken, turkey, pork, fish, and other meats. They
9 also did a pre-COVID and COVID-affected period. They used
10 another demand system. I had mentioned this verbally, the
11 Almost Ideal Demand System.

12 So the changes in that study, importantly, even
13 though it was different products, different time period,
14 were very congruent to those that I derived in my
15 analysis. In other words, the own-price elasticities
16 weren't uniform across those products; they were also
17 elastic. So in my view, the credibility of their work
18 reinforces mine.

19 Dr. Kaiser, as we have seen, testified that the
20 demand for milk is inelastic. He offered a number of
21 studies. There was one study, though, in his literature
22 review that found the own-price elasticity for fluid milk
23 to be negative 1.63, and the U.S. Dairy Sector model
24 was -- the own-price elasticity there was estimated to be
25 highly inelastic, but that estimate was arrived at using
26 annual data from 1990 to 2020.

27 And of the 38 studies cited by Dr. Kaiser, only
28 two were published after 2021, and most of the articles



1 covered the period 1964 to 2020. Only a few dealt with
2 milk by fat type and organic milk. And these are very
3 venerable studies, but they don't, in my view, reflect a
4 current retail marketplace for milk.

5 If I'm asked to opine on the own-price elasticity
6 of milk, I have to pit that to what is actually happening
7 currently in the retail marketplace, and none of the
8 studies cited by Dr. Kaiser considered health-enhanced
9 milk or lactose-free milk. Understandably, for
10 health-enhanced milk, since it's a relatively new product,
11 and lactose-free milk has been around, but it's growing in
12 stature.

13 A couple more points, Mr. Rosenbaum, and I'll be
14 complete.

15 A lot of these data in previous studies, and
16 rightly so, depend on the Agricultural Marketing Service
17 to provide monthly estimated fluid milk product sales. I
18 think everyone in this room is intimate with that. And
19 the USDA data are available nationally and regionally, but
20 for total milk, maybe organic milk, in the 11 Federal Milk
21 Orders, but you can't get any more fine disaggregation
22 than that.

23 And I would posit that the own-price elasticity
24 for milk exclusively on data dealing with schools,
25 colleges, universities, long-term care hospitals, and
26 correctional institutions is highly inelastic, meaning I
27 wouldn't expect much sensitivity concerning the quantities
28 purchased with these outlets with respect to price



1 changes. And if my supposition is correct, the AMS use of
2 those data should result in lower own-price elasticities
3 than studies such as mine that depend on retail outlets.

4 And, again, the principal reason is that these
5 studies which rely on the estimated fluid milk sales do
6 not reflect the current retail price for market --
7 marketplace for milk.

8 So, in conclusion, the more accurate measurement,
9 in my view, of the own-price elasticity that the FMMO
10 system needs to consider, needs to view the current market
11 conditions, more frequent information, i.e., weekly data
12 regarding consumer behavior rather than quarterly,
13 monthly, annual, and a consideration of the impacts, or
14 moving past the impacts of the pandemic, and importantly,
15 the primary competitors of various milk products like
16 bottled waters, sports drinks, juices, refrigerated
17 yogurt, plant-based milk alternatives, and protein
18 beverages. And my research at present is the only study
19 which fulfills these conditions.

20 Q. Obviously you have only completed your work very
21 recently.

22 Do you intend to submit this for publication?

23 A. Yes. December is a month with two weeks in it,
24 but as soon as December is over, I plan to submit this
25 article to the American Journal of Ag Economics, which is
26 the flagship journal in our profession.

27 MR. ROSENBAUM: Your Honor, Dr. Capps is available
28 for cross-examination.



1 THE COURT: Five-minute stretch break, or ten?

2 MS. TAYLOR: Ten.

3 THE COURT: Ten. We need a ten-minute break to
4 digest this, Dr. Capps. You are free to move about the
5 ship.

6 (Whereupon, a break was taken.)

7 THE COURT: Let's go back on record.

8 We're back on record at 2:25.

9 CROSS-EXAMINATION

10 BY MS. HANCOCK:

11 Q. Good afternoon, Dr. Capps. Just wanted to make
12 sure my microphone is arranged.

13 I just wanted to chat --

14 THE COURT: And before you go forward, would you
15 identify yourself?

16 MS. HANCOCK: I'm Nicole Hancock. I represent
17 National Milk.

18 BY MS. HANCOCK:

19 Q. Thank you for being here today.

20 I want to take a look at your slide presentation
21 that's marked as Exhibit 387 and just walk through a
22 couple of items that are on here, make sure that I'm
23 understanding some of the items that you have included.

24 You started off by, on page 3 of your slide
25 presentation, providing us with a metric that if the
26 calculation in determining price elasticity is greater
27 than 1, that means the product is elastic, as it's
28 reactive to that change; is that right?



1 A. Yeah. Yes, ma'am. Elastic in the sense that a
2 percentage change, whatever the percentage change in price
3 is, the corresponding change in quantity is bigger.

4 Q. Okay. And -- and if it's less than one, meaning
5 that it has a less than that whole number, it would be
6 considered inelastic?

7 A. Yes. Whatever the percentage change in price is,
8 we often use 1%, but the corresponding percentage change
9 would be lower --

10 Q. And --

11 A. -- in the opposite direction.

12 Q. And then unitary elastic, that's just if it's an
13 absolute equal one-to-one?

14 A. One-to-one.

15 Q. Okay. And then, the IRI study, let's see, it's
16 now called Circana; is that right?

17 A. Yes.

18 Q. When did you first start utilizing IRI as a
19 database that you use to establish elasticity?

20 A. In my career?

21 Q. Yeah.

22 A. You know, I -- I go back to working with standard
23 data, that is data that are available from supermarkets,
24 all the way back to 1986.

25 Q. Okay. You have been using the IRI data since
26 1986?

27 A. Not just the IRI data. We also, in our center at
28 AFCERC, we're regular subscribers to Nielsen data. We pay



1 an annual fee of \$7,000 to get access to Nielsen data.

2 Q. Is IRI a subscriber-based database as well?

3 A. I don't know. I have -- most of the time that I
4 have used IRI, it's been based on consulting arrangements.

5 Q. Okay. Well, and that's -- that's fair.

6 So in this situation, is the reason that you were
7 able to use IRI because you were acting in the consulting
8 capacity?

9 A. Yes. But even if I had a regular subscription as
10 I do with Nielsen, we are prohibited from using the
11 Nielsen data, for example, to do any consulting unless
12 approved by Nielsen.

13 Q. Okay. And have you ever asked Nielsen for
14 approval to do any private consulting?

15 A. No.

16 Q. And do you have to ask IRI for permission to do
17 private consulting?

18 A. I didn't have to ask. The data were purchased.
19 As long as IRI got their purchase amounts, we were free to
20 use the data.

21 Q. How much does it cost to purchase access to the
22 IRI data?

23 A. I did not -- I was not involved in the purchase.

24 Q. Who purchased it?

25 A. Presumably IDFA.

26 Q. Do you know when they purchased it?

27 A. Well, obviously beginning in 2022, because we had
28 asked for historical data back to 2017, I remember that.



1 There were two purchases, two -- for two periods. The
2 moving-past-COVID period was an add-on to a previous study
3 that I had done for the first two periods, the
4 pre-pandemic and the COVID period. We added more data.

5 Q. Okay. So what -- maybe I should back up a little
6 bit even further.

7 When were you first hired by IDFA to provide
8 expert analysis on the elasticity of fluid milk?

9 A. Sometime last year. But it wasn't just myself,
10 there was a colleague, Ariun Ishdorj, she did an
11 exhaustive literature view of previous studies dealing
12 with fluid milk. Jointly we looked at the data together
13 for -- to do the demand systems analysis, although I was
14 the one that was solely involved in that.

15 Q. Okay. So help me understand what you and your
16 colleague -- what was her name again?

17 A. Ariun, A-R-I-U-N; Ishdorj, I-S-H-D-O-R-J.

18 Q. Okay. And were you hired at the same time
19 together by IDFA?

20 A. She was the principal, and I became the
21 subcontractor to her.

22 Q. Okay. And that was in 2022?

23 A. I believe. I would have to -- I believe that's
24 true, but I'd have to check my records for accuracy.

25 Q. Okay. And at some point did you -- you said you
26 became the primary?

27 A. Yes.

28 Q. How did that arise?



1 A. Well, the question that was begged is, while we
2 had a pre-pandemic period and a COVID period, the question
3 was, well, what does the behavior look like once we move
4 past COVID?

5 And in the original data acquisition, well, we
6 didn't have any data past May 15, 2022. So I asked for
7 data from May 22, 2022, to August 13, 2023, weekly data,
8 for the same -- for the same categories that we had
9 initially used previously just to see what the behavior
10 would look like in the moving-past period, which is the
11 current, what I would say the current state of the retail
12 marketplace.

13 Q. Okay. So for your work with IDFA -- is it
14 Dr. Ishdorj?

15 A. Yes.

16 Q. -- Dr. Ishdorj and you had done an initial request
17 for data through IRI that IDFA purchased that took you
18 through the May 15th of 2022 time period?

19 A. Yes.

20 Q. And then some time after you did that analysis,
21 Dr. Ishdorj no longer was working on the project and you
22 continued on and made another request that went from
23 May 2022 until August of 2023?

24 A. Yes.

25 Q. And you don't know how much that data cost from
26 IRI on either scenario; is that right?

27 A. I do not.

28 Q. And how does that information or that data from



1 IRI, or what is now Circana, how was that delivered to
2 you? Was that electronic?

3 A. Electronic delivery.

4 Q. And is it in the form of spreadsheets or how was
5 the information relayed to you?

6 A. A myriad of spreadsheets.

7 Q. Okay. And then you analyzed that and distilled
8 that down into what we have talked about today?

9 A. Correct.

10 Q. Did you have a team of other people working with
11 you when you were analyzing that or did you do the work
12 yourself?

13 A. I'm the only person that ever touched the data or
14 saw the data.

15 Q. You did that as a consultant working for IDFA?

16 A. Yes.

17 Q. Did you do that as a part of your work with Texas
18 A&M or through your own private consulting firm?

19 A. It was outside the Texas A&M system. So
20 technically, yes, through my company, Forecasting and
21 Business Analytics, LLC.

22 Q. Okay. And then the work that you have put
23 together then, that's on your own individual behalf, not
24 on behalf of Texas A&M; is that right?

25 A. My own.

26 Q. Okay. And in totality, how much have you been
27 paid for the services that you have been providing to IDFA
28 to do this elasticity analysis?



1 A. \$40,000.

2 Q. And does that catch you up to date or is that just
3 historically what you have been paid already?

4 A. Up to date is -- except for my testimony today and
5 presumably tomorrow.

6 Q. Why not.

7 Okay. Let's turn to page 9 of your -- of your
8 PowerPoint presentation in Exhibit 387.

9 Was IRI acquired or sold to Circana? Is that --
10 was that the basis of the name change?

11 A. I really don't know when it happened, and it was
12 very quick. For a long, long time it was IRI, and then
13 you turned your head and IRI became Circana. So I really
14 don't know anything about the name change and why it came
15 about.

16 Q. And you said that you had been using it since the
17 1980s. I'm wondering if you can tell me any other time in
18 which you have acquired the IRI data for any of the
19 elasticity work that you have done historically?

20 A. Well, when I mentioned the Kellogg's work, well,
21 even though it was for Kellogg's, they wanted us to do a
22 case study for orange juice. So in that case we needed
23 outside information, and the proprietor there was IRI.
24 There may be others, but I would have to consult my
25 records.

26 Routinely, if I'm going to use scanner data,
27 there's two vendors, Nielsen or IRI. And many of the
28 cases, especially through AFCERC, because of our



1 subscription to Nielsen, I rely more on Nielsen. But they
2 are very similar in terms of what they capture, the
3 products, et cetera.

4 Q. And I think you told me that you had never used
5 Nielsen for your private consulting work because you have
6 never asked them for permission; is that right?

7 A. Well, as a subscriber, I'm prohibited. There's a
8 contract that we have to follow, and the contract said no
9 outside consulting. However, if IDFA chose to buy Nielsen
10 data and they would allow me to do that as a separate
11 entity, but I cannot use my subscription service to do any
12 consulting work.

13 Q. Okay. So then back to the IRI data.

14 You said that you recalled using it one time for
15 Kellogg's when you were doing a case study for orange
16 juice.

17 Can you think of any time where you have used the
18 IRI data for an elasticity of fluid milk?

19 A. I have not.

20 Q. If we look at page 9 on your PowerPoint
21 presentation in Exhibit 387, you gave us the breakdown in
22 the percentages of the milk that IRI, or Circana, captures
23 in its database; is that right?

24 A. Yes.

25 Q. And so if I'm understanding these percentages
26 correctly, it's 64% of the total milk volume for the
27 retail data is captured by that IRI database; is that
28 right?



1 A. Well, not alone. They also -- they have untracked
2 retail. I mentioned that H-E-B doesn't sell the data, so
3 that wouldn't be a part of that. But there may be other
4 retailers that want to remain anonymous and they
5 participate. So that's what is meant by untracked data.
6 Hence, if you add the 64% and the 12%, that's why you get
7 76% of milk volume coverage.

8 Q. Okay. So I'm not quite there. I'm going to get
9 there, but I'm not quite there. I'm still on the 64%.

10 A. Okay.

11 Q. You said H-E-B.

12 Is that -- did you say H-E-B?

13 A. I did.

14 Q. And what were you referring to there?

15 A. They are a large retail grocery store that don't
16 allow their data to be used by Circana, Nielsen,
17 et cetera. But other retailers would, but they don't want
18 to be labeled.

19 Q. Okay.

20 A. And hence, untracked retail.

21 Q. Okay. And so that's in the 36%; is that right?

22 A. That's in the 12%. It's -- it's a third of the
23 remaining 36%.

24 Q. Okay. So I'm back up at -- first just make sure
25 I'm clear on the 64%.

26 So the IRI data that you have access to, that's
27 retail -- that's all retail data; is that right?

28 A. All retail.



1 Q. And that retail data that you get from IRI
2 constitutes 64% of the total fluid milk volume?

3 A. Where the retailers are actually identified.

4 Q. Okay. So that -- thanks for that.

5 So it's 64% of the retailers identified?

6 A. Yes.

7 Q. Okay. And then of the retailers that are not
8 identified, that's the 36% that's then broken down with
9 12% untracked retail, 15% foodservice, 8% schools, 1%
10 shrink or other?

11 A. Well, not entirely. Not the whole 36%. But 12%,
12 or one-third, of that 36% is from unidentified retailers.

13 Q. And you said H-E-B was one of those?

14 A. H-E-B is not one of those. They don't
15 participate.

16 Q. Oh, so H-E-B is not even included in this?

17 A. Correct.

18 Q. And then there's other retailers that are included
19 that just don't want to be identified?

20 A. That's correct.

21 Q. Would Costco be one of those?

22 A. I have no idea.

23 Q. Okay. So you don't even on your industry
24 knowledge know who those untracked retail accounts would
25 be, do you?

26 A. The only reason I know about H-E-B is that we do a
27 lot of work for them from the university. They allow us
28 to use their data at times, not always. But they don't



1 participate with either Nielsen or IRI.

2 Q. Do you know if there's other retail accounts that
3 are not included in IRI?

4 A. You'd have to ask the Circana folks on that.

5 Q. Okay. I'm just asking if you know.

6 A. No, I don't know.

7 Q. Okay. Do you know if Costco is one of the retail
8 outlets that is included and reported in the IRI data?

9 A. I do not know.

10 Q. Okay. What about Starbucks, do you know if they
11 are included?

12 A. I do not know.

13 Q. And then schools would not be included, you know
14 that?

15 A. Yes, schools for sure, because we're talking about
16 data from retail outlets, so schools wouldn't fall into
17 that category.

18 Q. Okay. And so do you know as you sit here today
19 what percentage of the total fluid milk sales in the U.S.
20 is captured or analyzed in the IRI materials?

21 A. Just as I stated, 76%.

22 Q. Would you --

23 A. And that's documented, not by me -- and if you
24 will note, I have relied on Prime Consulting in a May 2023
25 document that I had, where they broke down, not in the
26 detail that you would like based on your earlier
27 questions, but that's where I got these numbers.

28 Q. Well, this says 76% of the milk volume sold at



1 retail outlets, right?

2 A. Yes.

3 Q. So this isn't 76% of the total fluid milk that's
4 produced in the country, is it?

5 A. No.

6 Q. Okay. And so my question was, do you know what
7 percentage of the total fluid milk that's produced in the
8 U.S. is reflected in the IRI database?

9 A. Oh, I still think it's likely it's about 76%,
10 because the other 24% are coming from foodservice,
11 schools, and other places based on the Prime Consulting
12 document.

13 Q. Okay. So you think that it's 76% of the retail
14 outlets -- or 76% of the milk volume that's sold at retail
15 outlets, you think that that also reflects 76% of the
16 total fluid milk in the country?

17 A. Yes, Nicole, think about it. Here (indicating) is
18 the milk being produced, and it's ultimately going to be
19 sold. Where is it sold? Retail outlets, foodservice,
20 schools, others, just as we have mentioned here.

21 Now, we don't have all of the retail outlets,
22 because H-E-B, for example, is a counter-example to that.

23 So I -- I think the volume that I state here, you
24 know, is reasonable to presume, to me, that 76% maybe is
25 the upper bound, but the actual figure is probably not far
26 removed from that.

27 Q. So of the 64% that you have described here of the
28 milk volume, that remaining 36% you stated at the end of



1 your presentation, you believed would be inelastic; is
2 that accurate?

3 A. You mean the demand for milk sold at those
4 outlets? Yes. That -- and that was a hypothesis that I
5 put forward. I haven't seen any work to suggest that.
6 But if -- you know, I have been involved with schools, and
7 I work a little bit with foodservice, and I have often
8 been told is, there's not typically that much negotiation
9 when it comes to various individual products, and they
10 even mention particularly data. I'm talking about
11 discussions with Sysco, for example, the largest
12 foodservice purveyor in the world, right there in Houston,
13 close to where we are, and it's just personal
14 communication.

15 And because of that -- all right? Sounds
16 reasonable to me. The school needs their milk.
17 McDonald's needs their milk for their Happy Meal. Okay,
18 there may be some, but we're not talking about, you know,
19 being quite sensitive to changes in prices, because milk
20 is not a dominant item at McDonald's. Milk is not the
21 dominant item at schools. And -- and often when you
22 consider those cases, it's not unreasonable to posit an
23 inelastic demand for those products.

24 Q. Okay. And so when you are reporting on the IRI,
25 you are reporting not on those inelastic 36%, but on
26 that -- that prior category that you have on page 9, the
27 64%; is that right?

28 A. Well, actually the 76%.



1 Q. Do you know if Walmart is tracked in that 64%?

2 A. I don't know except in my career, Walmart is
3 finicky.

4 Q. Like H-E-B?

5 A. Well, not -- not exactly. In the study that I
6 mentioned on orange juice, up until September 1996,
7 Walmart refused to participate. Something magical
8 happened after September 1996, and suddenly we have
9 Walmart data. I mean, I'm typically not the one doing the
10 ask for the data, because our budget couldn't afford the
11 price tag. But for those that are involved, you know,
12 that was the situation for Walmart.

13 But to answer your question -- sorry about the --
14 going down the rabbit hole -- I don't know if Walmart is
15 part of this dataset.

16 Q. Okay. And what about Sam's Club?

17 A. Similar. I have no idea.

18 Q. And you mention Sysco Foods.

19 Do you know if they are included in the IRI
20 dataset?

21 A. Definitely not.

22 Q. Because that's what services the foodservice.

23 A. Yes.

24 Q. Okay. Let's take a look at -- oh, you had
25 mentioned one of the reasons that you liked -- that you
26 used the Barten Synthetic Demand Model was that you liked
27 that the mean and variance don't change with time.

28 Do I have that correct in my notes?



1 A. The mean and variance of prices, quantities, and
2 total expenditure. Those are the prime, although not the
3 only components, involved in the demand systems analysis.

4 Q. And is the reason that you like those to be static
5 is because it gives you a control group to be able to --
6 to evaluate over time?

7 A. No. The key term is stationary. I don't have to
8 worry about trends in those data that could be colinear,
9 if you will, with other factors. And colinearity could be
10 a problem because if there's colinearity, that could
11 influence the magnitude and the sign of your estimated
12 coefficients. But the nice thing about the Barten
13 Synthetic Model, it handles that.

14 Now, other demand systems that don't have that
15 property, often they have to do some other manipulations
16 so as to avoid this colinearity aspect I was talking
17 about.

18 So other demand systems are fine, even though they
19 are not producing stationarity and prices, quantities, and
20 total expenditure. Those being the Almost Ideal System,
21 the Exact Stone -- Affine Stone Index Model I mentioned.
22 There's another, Quadratic AIDS model. These are the
23 prime candidates for demand systems.

24 But the Barten Model has this unique property of
25 we already are taking care of stationarity without other
26 adjustments that the other demand systems would have to
27 make.

28 Q. Okay. So it gives you that -- it gives you kind



1 of that stationary or that fixed control group to allow
2 you to compare over time without thinking that there's
3 other external influencing factors.

4 A. I wouldn't use the term control group. There's no
5 control group.

6 Q. Okay. So maybe --

7 A. We're talking about no trends. You don't have to
8 worry about trends in --

9 Q. Okay.

10 A. -- quantities, prices, and total expenditure
11 because of the use of log differences.

12 Q. Okay.

13 THE COURT: May I stop you there? I'm looking at
14 page 11. You mentioned Barten, you mentioned Stone, and
15 then you mentioned another company I didn't quite catch.

16 THE WITNESS: Not a company, Judge, a demand
17 system. Almost Ideal Demand System or Quadratic Almost
18 Ideal Demand System.

19 THE COURT: Yes. And you did identify that one in
20 your slide presentation. Thank you.

21 BY MS. HANCOCK:

22 Q. I want to look at -- at the results that you have
23 on, I think it's page 12, where you have your bar graph.
24 And these are the three timeframes that you have evaluated
25 pre-COVID, COVID-affected, and moving past COVID; is that
26 right?

27 A. Yes.

28 Q. And so if we look at the fluid milk side, so the



1 blue columns, for total milk for pre-COVID, you have that
2 at negative 1.10; is that right?

3 A. Yes.

4 Q. So would you consider that to be mildly elastic?

5 A. Elastic.

6 Q. So not mildly, just regular elastic.

7 A. Elastic.

8 Q. Okay. You wouldn't qualify that?

9 A. Economists don't use adjectives.

10 Q. Okay. Well, I thought that -- I thought you did
11 actually use an adjective, because when you talked about
12 lactose-free, I think you said it was very elastic when it
13 was at \$4.11, didn't you?

14 A. I may have done that.

15 Q. Okay. So not as a general rule, you don't have --
16 it's not like how Portland describes rain, where there's
17 12 different ways to describe it. You just call it
18 elastic or inelastic?

19 A. Well, as I said on page 2, it's either elastic,
20 unitary elastic, or inelastic, just being technical.

21 Q. And it's a hard line at the 1; is that fair?

22 A. Yes. And importantly, I should offer
23 statistically different from 1. I mean, so you might ask,
24 well, is negative 1.1 actually 1? Well, there is
25 statistical tests that we do to determine if it's really
26 statistically 1 or is it really negative 1.1? And all of
27 these have been -- you know, we have looked at statistical
28 tests associated with them, so we don't have to worry



1 about any of these being unitary elastic, for example,
2 even though the total milk own-price elasticity that we
3 cited was negative 1.1.

4 Q. And so the COVID-affected period would be
5 inelastic for total milk?

6 A. Yes.

7 Q. And then the post-COVID would be back to elastic?

8 A. Yes.

9 Q. And for organic milk, it starts off in the
10 pre-COVID as inelastic, and then goes into the next two
11 periods for COVID and past-COVID to being elastic?

12 A. Yes.

13 Q. And enhanced-health (sic), is that those muscle
14 shakes that you were talking about?

15 A. Health-enhanced.

16 Q. Or health-enhanced?

17 A. Probably best example is Fairlife.

18 Q. Okay. So Fairlife would fall into that category,
19 health-enhanced?

20 A. I believe.

21 Q. What about lactose-free?

22 A. As the name suggests, milk without lactose.

23 Q. So if Fairlife had a lactose-free product, would
24 that be in health-enhanced or would that be in
25 lactose-free?

26 A. That's a good question. I would have to consult
27 my notes on that.

28 But my recollection tells me, when we calculated



1 lactose-free, we excluded explicitly Fairlife. Therefore,
2 Fairlife would be in the health-enhanced category.

3 Q. Do you know what percentage of the total milk is
4 comprised of the traditional white?

5 A. Based on my analysis?

6 Q. On the analysis that you have reported in on
7 page 12 in your Exhibit 387.

8 A. Will you allow me to go directly to my testimony?

9 Q. Sure.

10 A. Because I have a table that speaks directly to
11 that.

12 Q. That would be great.

13 Are you talking about Exhibit 386?

14 A. I am. I'm sorry, I have to provide the exhibit
15 numbers.

16 Q. That's okay. Just want to make sure our record is
17 clear.

18 And then if you just let us know what page you are
19 turning to.

20 A. Yes, ma'am. It will be page 6, Table 1.

21 Q. And so for the -- of the total milk, how much is
22 comprised of traditional white?

23 A. Well, you will see for total milk there are three
24 columns corresponding to each of the periods, right? So
25 for total milk we had 65% of the quantity -- or 60 -- not
26 65% -- 65.39 million gallons; in the COVID-affected
27 period, 60.24 million gallons; in the moving-past period,
28 56.9 million gallons.



1 Q. Okay. So you don't know what percentage -- well,
2 let's start -- let me say this differently then. For each
3 time period, the percentage of traditional white milk, and
4 for all the other varieties that you have noted here,
5 would make up a different percentage of the total milk?

6 A. Well, put another way, if you were to add -- let's
7 just pick a period. Okay? Let's pick the pre-COVID
8 period. So in total there's 65.39 million gallons. And
9 if you were to add the quantity for traditional white
10 milk, organic milk, traditional flavored milk,
11 health-enhanced milk, and lactose-free milk, that should
12 sum pretty close to the total milk, if not exact. I don't
13 know. You have a calculator in front of you.

14 Q. Okay. So my math suggests that for pre-COVID,
15 traditional white milk would make up 83.2% of the total
16 milk.

17 Does that sound right?

18 A. Yes. If you take 54.39 and divide by 65.39 and
19 multiply that by 100.

20 Q. Okay. Is it fair to say that traditional milk
21 makes up the largest percentage of the total milk across
22 all time periods?

23 A. Absolutely.

24 Q. And did you, for total milk, do a weighted average
25 when you were establishing the elasticity that you have
26 noted on your bar chart?

27 A. No need.

28 Q. And why is that?



1 A. Because elasticities are unitless measures.

2 Now, each of the commodities here, the typical
3 unit of measurement are gallons. But that isn't the case,
4 for example, for juices or sport drinks or refrigerated
5 yogurt, which is measured in pints. But when you put the
6 data together in the system and the elasticity is
7 generated, we don't have to worry about units of
8 measurement.

9 Q. So when you -- I'm just -- so maybe you just have
10 to bear with me and pretend like I'm a student of yours,
11 but I'm just trying to understand.

12 When you have, for example, in your pre-COVID
13 period, negative 1.10 for total milk as the elasticity,
14 I'm trying to make sense of that when I see that 83.2% is
15 at an inelastic .77.

16 A. I think I understand the notion of your question
17 now.

18 As I mentioned in my testimony, you're thinking
19 that if I just took a weighted average of the elasticity
20 based on my 11-commodity system, that would give me the
21 elasticity for total milk.

22 But as I testified, to get the elasticity for
23 total milk, that was actually a separate demand system,
24 still using the Barten Model, but now a seven-equation
25 demand system, where total milk was the aggregate category
26 and the other six were juices, bottled water, sport
27 drinks, et cetera.

28 So that negative 1.1 or negative .58 or negative



1 1.26 for total milk is not a weighted average of the
2 elasticities of the segments that were part of the
3 11 (sic) demand system.

4 Q. So that would take into account the alternative
5 beverages as well, and that's why the elasticity is
6 greater for total milk?

7 A. Well -- well, the elasticity accounts for the
8 alternative beverages and yogurt, but all the individual
9 segments, those five individual segments, are collapsed
10 into total milk.

11 Q. Okay.

12 A. And the only reason I did that was to, down the
13 road, make a comparison with Dr. Kaiser, which I have
14 testified.

15 Q. Okay. So I might have to come back to this to
16 make sure I understand it, so just bear with me on it.
17 Maybe I'm a little slow to get that one, but I'm going to
18 get there.

19 Okay. Okay. Let's turn to page 14. I want to
20 just -- you have your major takeaways --

21 A. 14 of the PowerPoint?

22 Q. Thank you. Yes, Exhibit 387 on the PowerPoint.

23 And you have major takeaways, but then the
24 paragraph here looks like it is citing from a couple of
25 other studies, and I want to make sure I understand this.

26 So you have -- the first sentence there says,
27 "Using a demand systems analysis," and you cite to the
28 Ghazaryan-authored study, estimated the price elasticities



1 for the time period between 2012 and 2017 to be \$1.30 for
2 skim milk -- I'm sorry, not \$1.30 -- to be negative 1.30
3 for skim milk, negative 1.67 for reduced fat, and negative
4 1.45 for whole milk; is that right?

5 A. Yes.

6 Q. And you have this under your major takeaways.

7 Were you saying that you were able to replicate
8 that study in your IRI analysis?

9 A. No. My -- my major takeaway is that the last
10 bolded sentence on the third paragraph, "the demands for
11 disaggregated milk products" -- from my analysis -- "are
12 sensitive to changes in prices." I'm just using these two
13 studies done in 2023 to report that while their results
14 are very similar to mine, so -- and I guess in formulating
15 the PowerPoint, I should have had the paragraph starting
16 with "each" before the paragraph starting with "using a
17 demand systems approach."

18 Q. Okay. So that's just the basis for making you
19 feel like your information was more credible because you
20 found other studies that came to similar ranges; is that
21 fair?

22 A. Well, I'm always confident in my work, and it's
23 nice to have corroboration. Although, I have stood alone
24 in other studies, too. But I stand behind the work that I
25 did.

26 Q. It's fair to say you are not afraid to stand
27 alone?

28 A. I'm not afraid.



1 Q. Okay. And then you also cite to a study by
2 Nielsen that was published in 2023 for the period of March
3 of 2018 to 2022.

4 And in that study, Nielsen came up with a
5 conclusion that regular dairy milk was inelastic; is that
6 right?

7 A. Almost. Nielsen was the data they used. They
8 didn't use IRI. Son and Lusk were the -- were the authors
9 of that working paper.

10 And you're right, based on the Almost Ideal Demand
11 System Model, they did find the own-price elasticity for
12 regular dairy milk to be .95 and for lactose-free to be
13 negative 1.39.

14 Q. Okay. And that would mean that regular dairy milk
15 in that study is inelastic; is that right?

16 A. Yes.

17 Q. And I didn't realize that Nielsen there meant the
18 study. That doesn't mean that's one of the authors?

19 A. I probably shouldn't have bolded Nielsen.

20 Q. Okay. So Nielsen would have just been the
21 database that Son and Lusk used in order to come up with
22 that inelastic regular price analysis?

23 A. In their analysis.

24 And the other commonality between these studies,
25 importantly in my view, they used weekly data.

26 Q. Okay. And I think you talked about that in a part
27 of your testimony, that it was important for you to have
28 the use of weekly data as well; is that right?



1 A. If I really wanted to get a handle on what is
2 actually happening in the retail marketplace. And the
3 principal presumption for that, everybody shops
4 differently. I'm just using myself as a test case. Every
5 week, you know, I'll march into a grocery store. And I
6 like that, because I deal a lot with scanner data. I want
7 to see the products, not just dairy products; there are
8 other products that I work with, too. But my frequency
9 for shopping is weekly. And just, you know, talking among
10 my friends, they do -- do essentially the same thing.

11 I -- I don't have any idea what percentage of the
12 population shops weekly, monthly, quarterly. I can't
13 imagine it would be on a quarterly or annual basis. I
14 mean, if you are talking about grocery shopping and not
15 just the purchase of turkeys around Thanksgiving or
16 Christmas.

17 So to me, the weekly timeframe, again, to get the
18 picture of what's happening in terms of consumer behavior
19 at the retail marketplace, the weekly timeframe makes a
20 lot of sense to me. And not just me, other -- other
21 analysts have done the same thing.

22 Q. And in your experience, do the prices in the
23 retail outlets change on a weekly basis?

24 A. Some do; some don't.

25 Q. More common that they would change, if they are
26 going to change, on more of a monthly basis or seasonal
27 basis?

28 A. Well, you got to remember there's a number --



1 well, let's pick any of the categories. Let's just take
2 traditional white milk, right? There are different UPCs.
3 So when Circana puts together the weekly amount of
4 movement in terms of gallons and the amount of sales, they
5 are aggregating all of the UPCs that make up the
6 traditional white milk category.

7 And the price that is offered, in fact, in my
8 testimony, I say Circana offers average prices, that's a
9 weighted average price. You know, where you take the
10 dollar sales that have been aggregated off all over the
11 UPCs that make up the white milk category, divided by the
12 aggregate of all the gallons of the UPCs associated with
13 white milk, and there you get an average retail price.

14 So I would imagine there's some UPCs that prices
15 don't change in a week, but others could. And, therefore,
16 if we were to examine -- I didn't do it -- but it wouldn't
17 surprise me upon further examination, if I looked at the
18 average prices of any of the 11 categories I'm using, no
19 two would be exactly the same from one week to the other.

20 Q. Okay. Not a huge volatile shift, but there could
21 be small changes that would happen?

22 A. There could be. I know you have been to the
23 grocery store lately. I'm -- and I'm an economist, and
24 I'm shocked when I check out. You know, how much did I
25 buy? Really? That much? Whereas a year ago I wasn't
26 seeing that much of a change.

27 So given the fact that we have had inflation,
28 although fortunately it's become a little more modest, but



1 still, you could see some run-up in prices attributed to
2 that. But that's not the only factor that could affect
3 prices, either.

4 Q. When you talk about inflation, that's inflation
5 across the board for all products since the pandemic; is
6 that right?

7 A. That's right.

8 Q. And you, on page 17 of your presentation, you talk
9 about the pandemic created a structural shift in the
10 demand for fluid milk.

11 What's the structural shift that you are
12 describing there?

13 A. Technically, economists would say time-varying
14 parameters. If there were no structural shift, key
15 parameters like the own-price elasticity, you know, would
16 not change much. They are not going to be exactly the
17 same. But when you see, you know, the -- and you saw the
18 pictorial representation I had. I think everyone would
19 agree, at least for the fluid milk products -- it's
20 interesting that for the alternative beverages, for many
21 of them, their own-price elasticities didn't change much,
22 but for fluid milk, that was not the case.

23 Q. Okay. And how did the pandemic exacerbate that
24 issue?

25 A. Well, I don't know about exacerbating the issue,
26 but, you know, why did it bring about a structural change?
27 When consumers, especially with young children, are forced
28 to stay home, now maybe they would be able to purchase



1 more milk than they had before. And also, there could be
2 some possibility that they would be willing to pay more
3 for a product just in order to be able to get it, because
4 oftentimes the product may not be on the shelves during
5 the pandemic.

6 Q. And -- and the whole supply chain was affected in
7 a similar way, in that there were a lot of supply issues
8 during the pandemic; is that right?

9 A. Just based on my reading, I don't have firsthand
10 knowledge, but just as a --

11 Q. Based on your trips to the grocery store?

12 A. Yes, based on my trips to the grocery store, you
13 bet.

14 Q. Okay. And -- and some of the highest inflation
15 that we have seen over the last 40 years occurred as a
16 result of the pandemic?

17 A. No. Did not occur because of the pandemic.

18 Q. You think that it was other factors, too?

19 A. I think there were definite other factors.

20 Q. Do you think that the pandemic contributed to that
21 as well?

22 A. The -- if you -- you have got several questions
23 going on. Let me see if I can tackle them.

24 If you are asking me what do I think is behind
25 inflation? The rise in energy prices, principally the
26 major factor by far. Why is that? Well, we have to
27 transport the product from the farm to the consumer.
28 Well, that takes energy. For milk and other beverages, we



1 have to refrigerate it. That takes energy. And none of
2 that has anything to do with the pandemic.

3 Q. Okay. That's just independent of it and happened
4 to coincide with the supply chain issues with the
5 pandemic?

6 A. But the inflation actually took place a little bit
7 later after the pandemic. I mean, everybody's in
8 disagreement about beginning and ending of the pandemic.
9 The beginning of the pandemic, according to many, was
10 March 15, 2020. The end was May 13th, 2023, by the CDC.

11 That said, I have a close friend who has COVID
12 right now.

13 So have we moved past COVID? That's just a
14 rhetorical question.

15 Q. And that was a question that I had on here. You
16 have the past-COVID period as listed between May 22nd of
17 2022, and August 13th of 2023, but it sounds like that
18 might be not the actual end date. It's just continuing to
19 be this post-pandemic period?

20 A. Well, that's why we called it the
21 moving-past-COVID period. I didn't say COVID was over.

22 Q. Okay.

23 A. But politically, you know, CDC, current
24 administration, they were touting the end of COVID. Well,
25 we're not saying that. We're just saying moving past
26 COVID.

27 Q. Is it fair to say that we're still in a period of
28 volatility?



1 A. What volatility are you referring, to what --

2 Q. To the market in general, to the inflationary
3 costs, to the supply chain issues, to things that are
4 affected by the pandemic.

5 A. I would say the disruptions that we saw in the
6 supply chain eased quite a bit in the moving-past-COVID
7 period relative to the pandemic or the COVID period.

8 Q. So the structural shift that you have said
9 occurred as a result of the pandemic, do you think that
10 that's stabilized?

11 A. If you define stabilization in terms of
12 disruptions in the supply chain, I think we -- we see
13 that. But there's still reported cases of COVID, so I
14 would never call it the end of COVID, as the CDC declared.

15 Q. What about on the structural shift in the effects
16 on consumers' buying behaviors?

17 A. Well, because of the pandemic, kids couldn't go to
18 school, so they couldn't rely -- if they were in
19 low-income families participating in food nutrition
20 service programs like school breakfast or national school
21 lunch program, that they are not getting milk there. So
22 they were getting milk at home.

23 But even for folks that wouldn't have qualified
24 for those programs, the kids were at home. And
25 particularly for breakfast, maybe that meant -- and,
26 again, this is just speculation on my part, but I think
27 reasonable -- milk was more prevalent if you could find
28 it, if it was available on the shelf. Okay?



1 So that's what I think the pandemic brought to the
2 table that you didn't see in the pre-pandemic period or
3 the moving-past period, because now children were allowed
4 to go to school.

5 Q. Okay.

6 MS. HANCOCK: Let's mark an exhibit here really
7 quick.

8 THE COURT: Next exhibit number is 391. Thank
9 you.

10 (Thereafter, Exhibit Number 391 was marked
11 for identification.)

12 THE COURT: We'll go off the record in just a
13 moment to distribute those, but I have marked as NMPF-105
14 as Exhibit 391.

15 Let's go off record.

16 (An off-the-record discussion took place.)

17 THE COURT: We're back on record at 3:17.

18 Ms. Hancock.

19 BY MS. HANCOCK:

20 Q. Dr. Capps, we have provided you with Exhibit 391.
21 This comes from the U.S. Bureau of Labor Statistics and
22 the Consumer Price Indices.

23 Are you familiar with that database?

24 A. Yes.

25 Q. Have you ever looked to that as a resource?

26 A. At times, but not for this analysis.

27 Q. Okay. And so if we look at the time period that
28 you have identified as moving past COVID, that's May of



1 2022 through August of 2023, for milk prices, that was
2 somewhat of anomalous period; would you agree?

3 A. Anomalous in what sense?

4 Q. Compared to historical prices.

5 A. Well, if you look at the January, February, March,
6 and April of 2022, I still see high prices there, and that
7 wasn't part of what I call the moving-past-COVID period.

8 Q. Right.

9 A. Further, these data are year-over-year percentage
10 increases. What I report are the -- on that Table 1, back
11 to my original deposition (sic) on page 6, were the
12 average prices. I did not calculate a year-over-year
13 price.

14 Q. And that you -- you said "deposition," but you
15 mean your written testimony in Exhibit 386?

16 A. I did. I'm sorry. I'm going to have to use those
17 numbers a little better. Exhibit 386, page 6, Table 1.

18 Q. Okay. And so your -- in your experience, you are
19 not familiar with whether the time period that you have
20 identified as "moving past COVID" is the period of time in
21 which milk prices peaked?

22 A. Well, let's go back to Exhibit 386, page 6,
23 Table 1, right?

24 In the -- consider the price column, and consider
25 total milk, because you have a column here from BLS for
26 all fluid milk. Total milk average price, pre-COVID,
27 3.79; average price, COVID-affected, 4.31; average price,
28 moving past COVID, 4.95. Prices rose on average.



1 Same thing is true in every case of each of the
2 five milk segments: Traditional white, organic,
3 traditional flavored, health-enhanced, lactose-free milk.
4 We're not comparing the same items, though, because you
5 have year-over-year increases, and what I'm reporting are
6 average prices starting during the period.

7 But you can see that prices, indeed, have risen
8 across the three periods. Again, not year over year, just
9 on average. And that is consistent up until, I suppose,
10 March of '23 with your year-over-year increases.

11 Q. And then they began to taper at the end of the
12 time period that you identified as your post -- or your
13 moving-past-COVID period; is that right?

14 A. Yes. You know, based on the data that you have.
15 But, again, your data, we're comparing apples and
16 oranges -- I hate that phrase -- but you have
17 year-over-year increases. I'm talking about average
18 prices during the period. They are not the same.

19 Q. Okay. So then let's take a step back and just
20 talk about your knowledge.

21 Is it true to say that beginning in April of 2023,
22 that the prices of milk began to taper off of the higher
23 prices that had been experienced the year prior?

24 A. Based on the data you laid before me in terms of
25 the BLS?

26 Q. I'm asking you based on your experience in the
27 work that you do as an economist.

28 A. My experience, you know, I didn't pay close



1 attention to individual products, I focused on the all
2 items. And as I mentioned previously, inflation was
3 rampant, and then suddenly has begun to drop, and that's
4 exactly what we see here on the second column of all items
5 of Exhibit -- what is it, 394?

6 THE COURT: 391.

7 THE WITNESS: 391. Okay. So what I see here,
8 based on the all items column, yes, I -- I wouldn't
9 challenge BLS. I wouldn't do it anyway.

10 BY MS. HANCOCK:

11 Q. Okay. So let's -- so in your testimony in
12 Exhibit 386, this is your written testimony. Let's look
13 at page 4. And this is talking about that 36% of the milk
14 that is not reflected in the IRI. And you state that,
15 "The own-price elasticity of milk based on" -- "or based
16 exclusively on data dealing with schools,
17 colleges/universities, long-term care, and senior living,
18 hospitals, and correctional institutions is likely to be
19 highly inelastic."

20 Do you see that?

21 THE COURT: Adverb.

22 THE WITNESS: I'm sorry?

23 MS. HANCOCK: You did use an adverb there; is that
24 right? Nothing gets past Judge Clifton, by the way.

25 THE WITNESS: But I said "adjective."

26 MS. HANCOCK: You said adjective.

27 THE COURT: Oh. That's true.

28 MS. HANCOCK: I guess it really would be an



1 adjective, right? Because inelastic is not a verb, so it
2 would be an adjective here, right?

3 THE COURT: That's true.

4 THE WITNESS: Would be likely to be low.

5 BY MS. HANCOCK:

6 Q. Okay. What is -- what is "highly inelastic"? Can
7 you quantify the range that would fall into "highly
8 inelastic"?

9 A. You know, just -- my experience would be negative
10 .1, negative .2, negative .3, but once you move beyond
11 negative .3, there is some sensitivity.

12 Q. Okay. The range would be negative .1 to
13 negative --

14 A. I wouldn't want to be quoted on it. You asked me
15 my opinion. If -- I would feel more comfortable if you
16 were to use the word "highly," negative .1, negative .2,
17 at the most.

18 Q. Okay. And this is your word "highly inelastic."

19 A. I know.

20 Q. I'm just asking you what the range would be that
21 would fall into highly inelastic. And as I understood
22 your testimony, you said the range would be negative .1 to
23 negative .3; is that right?

24 A. I would correct that.

25 Q. Okay. What would it be?

26 A. At most, negative .2. And that's just personal
27 experience.

28 Q. Okay. So zero to negative .2?



1 A. Seems reasonable.

2 Q. Okay.

3 A. In other words, just as I said in words, "not much
4 sensitivity" -- that's the next sentence -- "concerning
5 quantities purchased with respect to price changes."

6 Q. Okay. And then you go on to say, "As such,
7 studies based on the estimated fluid milk sales data
8 provided by the USDA, AMS should result in lower own-price
9 elasticities than studies based on the sales reported at
10 various retail outlets."

11 Are you comparing the differences that would
12 result when you look at the USDA reported data as compared
13 to the IRI data?

14 A. I'm inferring that.

15 Q. Okay.

16 A. Because a lot of the previous studies that use the
17 USDA and AMS data, because they are dispositional data,
18 they go to various outlets, but they also go to the
19 outlets that you just listed. And I'm supposing that if
20 there isn't much sensitivity there, then it isn't, to me,
21 surprising that studies that rely on the USDA AMS data
22 result in lower own-price elasticities than studies that
23 would be represented at the retail outlet, particularly on
24 a weekly basis.

25 Q. Do you ever use the USDA data in your --

26 A. I have.

27 Q. -- in your elasticity analysis?

28 A. I have.



1 Q. -- and when you don't have somebody buying your
2 IRI data for you, is that the data you use?

3 A. That's not the reason I use the data.

4 Q. Why is it that you use the USDA data?

5 A. Depends on the question that is being posed.

6 Q. What question needs to be posed to you for you to
7 use the USDA data?

8 A. Well, since 2011 I have been the recipient of a
9 USDA AMS contract to look at evaluating the effectiveness
10 of the national dairy programs. The question there is,
11 what is the impact of the advertising and -- advertising
12 and promotion programs on the dairy industry? The data
13 that we use in that, because the advertising and promotion
14 expenditure data are on a quarterly basis, is a quarterly
15 timeframe. And those data go all the way back on a
16 quarterly basis, sequentially updated every four quarters
17 every year, with a report to Congress. They go all the
18 way back to 1995.

19 Well, in 1995, no health-enhanced milk. 1995,
20 maybe very little, if any, lactose-free milk or organic
21 milk. Even if I wanted to break down the data, that would
22 not be available back to 1995. And even if I wanted to,
23 and even if it were available, Circana -- neither Circana
24 nor Nielsen would be able to provide data all the way back
25 to 1995.

26 And probably, most importantly, the own-price
27 elasticity was not the main course in that analysis.

28 Remember, the question I was being asked is: What is the



1 impact of advertising and promotion?

2 Now, in formulating demand functions, and in that
3 methodology, I didn't use demand systems. We only focused
4 on fluid milk. Why? Because the advertising and
5 promotion data weren't broken down to how much was
6 expended on traditional white milk, traditional flavored
7 milk, organic milk. They just had available the data on
8 the aggregate category of milk. So there was no need to
9 take into account interdependency. That wasn't the
10 feature of doing that analysis anyway. That's why I said
11 it depended on the question being asked.

12 So it was quite reasonable to come up with
13 single-equation demand functions using the data, the
14 estimated fluid sales data, great dataset, from AMS and
15 USDA to address that particular question.

16 So we aggregated up from their monthly data to a
17 quarterly data, and our model, single-equation model, had
18 price in it, yes, but for the aggregate fluid milk
19 category, controlling for other factors, income. We used
20 the CPI for non-alcoholic beverages. There was
21 seasonality because we had quarterly data, just as there
22 was seasonality in my Barten Demand Systems Model. That
23 was in the fine print, but we adjusted for seasonality as
24 well.

25 But again, the feature was, well, what is the
26 impact on advertising and promotion? There we were
27 concerned about elasticities, but the elasticity was
28 pertaining to the advertising and promotion dollars.



1 So for every 1% change in advertising and
2 promotion dollar spent by DMI, MilkPEP, or qualified
3 programs, the three entities that make up the \$400 million
4 advertising and promotion budget for milk, you know, what
5 is the impact in terms of fluid milk?

6 We also did cheese. We also did butter. We also
7 did all dairy products. And we also did exports.

8 So -- but the question that was being addressed is
9 the impact on advertising and promotion. The question
10 was: What is the appropriate own-price elasticity?

11 We had to be functional, because if you have
12 demand functions and you don't have the measure of price,
13 you have no demand function. It wouldn't stand up to
14 scrutiny.

15 And by the way, that work, these annual reports to
16 Congress are peer-reviewed, so they have all stood up to
17 peer-review. And the last one we even had to put in
18 adjustments for the pandemic. And we -- and those reports
19 are submitted each year and should be publicly available.

20 But I contract with AMS. I send them the reports.
21 They -- they engage in a peer-review. And after that, I'm
22 just supposing I look for them from time to time to see if
23 they are up on the website.

24 Sorry about being longwinded, but I just wanted to
25 illustrate. Depends on the question being asked. Here
26 the question is, well, what is the appropriate own-price
27 elasticity for fluid milk? Different question.

28 Q. So when -- there's a few things in there. I just



1 want to understand it a little bit better.

2 So as I am -- I started there by asking you what
3 question was posed to you in order for you to consider the
4 USDA data. And you said when you were doing your
5 evaluations for U.S. Dairy Programs that you do for
6 Congress each year; is that right?

7 A. Yes.

8 Q. And that is a peer-reviewed process?

9 A. Yes.

10 Q. Who peer-reviews that for you?

11 A. Members of AMS.

12 Q. Anyone --

13 A. Economists.

14 Q. Anyone else other than AMS that peer-review that
15 for you?

16 A. Not to my knowledge. But in the past, we weren't
17 able to publish the results due to a contract, but now for
18 this year, we have that capability. So going forward, in
19 addition to trying to publish my analysis based on
20 own-price elasticity, we're going to try to publish that
21 in an academic journal that will get outside
22 peer-reviewed, that is outside AMS and USDA. But once
23 again, I -- I stand on the basis of my work.

24 Q. Okay. So -- but everything that you have already
25 done for purposes of evaluating the U.S. Dairy Programs
26 has only been peer-reviewed by AMS?

27 A. Yes, to my knowledge.

28 Q. And then going forward --



1 A. I mean, they may have had others peer-review it.
2 And I know in the past when Dr. Kaiser did that, I was
3 asked to peer-review his work. He may have been asked to
4 peer-review my work, but I have no knowledge of that.

5 Q. How long have you been publishing the U.S. Dairy
6 Programs evaluation?

7 A. Since 2011.

8 Q. And is that an annual publication?

9 A. Annual.

10 Q. And when is the last one that you published?

11 A. The last one was handed over and finalized in
12 August of 2023, using data from 1995 to 2021.

13 Q. And is that only using USDA's data?

14 A. Well, the -- the basis for fluid milk, yes. But
15 in general, true, because we looked at the USDA
16 disappearance data for cheese, butter, and all dairy that
17 are regularly put out by the Economic Research Service and
18 AMS.

19 Q. And when you do your own-price elasticity
20 evaluation for the U.S. Dairy Programs, are you
21 evaluating -- are you evaluating the percentage of change
22 in the quantity demanded that would be reflective of a 1%
23 change in the price of a product?

24 A. We have many elasticities that we generated with
25 our single-equation models. Own-price elasticity is one.
26 Income elasticity is another. But the most important ones
27 are the promotion and expenditure elasticities.

28 Q. What I'm trying to figure out is, is part of your



1 publication that you do annually for evaluating the U.S.
2 Dairy Programs, are you conducting a fluid milk own-price
3 elasticity analysis that measures what you're measuring
4 here today?

5 A. I'm not conducting an own-price elasticity
6 analysis. I'm conducting an investigation of the impacts
7 of advertising and promotion on fluid milk, cheese,
8 butter. But in the course of doing so, using the AMS
9 data, I do report, in the Congressional report to
10 Congress, and we also are required to provide a technical
11 report, I report the own-price elasticities and the income
12 elasticity, but that's not the feature item of that
13 analysis.

14 Q. Understood.

15 It's just a component as part of your overall
16 analysis that you perform when you are evaluating the
17 programs?

18 A. Yes.

19 Q. Okay. And, in fact, Dr. Kaiser, and his exhibit
20 is 115, he cited to numerous studies that he relied on to
21 evaluate his price elasticity, and he was careful to say
22 it only peer-reviewed articles.

23 Did you read his testimony?

24 A. Yes.

25 Q. And did you look at the peer-review articles that
26 he cited in support of his elasticity findings?

27 A. Yes. There were 38 of them, but most of them I
28 was already familiar with.



1 Q. Yes. And one of them was yours; is that right?

2 A. I'm very familiar with that.

3 Q. And that was the -- it said 2022, and it cited as
4 the Chapter 3 of the USDA Report to Congress on the
5 National Dairy Promotion and Research Program and the
6 National Fluid Milk Processor Promotion Program, it's for
7 USDA, Washington, D.C., 2022.

8 Is that the one that you are referring to that you
9 are very familiar with?

10 A. Yes.

11 Q. And is that one of the evaluations that you
12 performed for USDA's Dairy Program?

13 A. Yes.

14 Q. And that one was published in 2022?

15 A. Yes, if it's the most recent one. I don't know, I
16 thought Dr. Kaiser cited the one before the most recent
17 one.

18 Q. So Dr. Kaiser started -- cited the one in 2022,
19 and then you told me just now that you published another
20 one in September of '23?

21 A. I know it's confusing, but the -- you are right.
22 The one that is cited in 2022 uses, you know, not the most
23 recent dataset. So as I said, each one of these
24 Congressional reports are updated sequentially with four
25 new quarterly observations.

26 Q. And your -- your 2022 report that was -- that's
27 cited by Dr. Kaiser, concluded that the price elasticity
28 for fluid milk was negative .071; is that right?



1 A. I believe that's accurate, but I would have to
2 look at it. But it was inelastic, yes.

3 Q. And you told me you were very familiar with it,
4 but you recall at least that it was inelastic in the 2022
5 publication; is that right?

6 A. Yes.

7 Q. Okay. And then in your most recent publication in
8 2023, what did you conclude was the elasticity of fluid
9 milk?

10 A. Essentially in the same neighborhood.

11 Q. Did you -- is it actually less than that by half?

12 A. By half, yes.

13 Q. So it's actually negative .038; is that right?

14 A. Yes.

15 Q. Okay.

16 MS. HANCOCK: Let's go ahead and mark it just so
17 we can get it in. I think the 2022 has already been taken
18 judicial notice of earlier, so I'm not going to mark that.

19 THE COURT: Ms. Hancock, I would like to take a
20 break. What would you like, five minutes, ten minutes, or
21 15?

22 MS. HANCOCK: Whatever you prefer, Your Honor.

23 (Court Reporter clarification.)

24 THE COURT: 15 would be great. Please be back
25 ready to go at 3:55. We'll go off record at 3:40.

26 (Whereupon, a break was taken.)

27 THE COURT: Let's go back on record.

28 We're back on record at 3:55.



1 Ms. Hancock, you were marking an exhibit when I
2 interrupted. What should we do next?

3 MS. HANCOCK: We should mark the exhibit.

4 THE COURT: All right. It will be 392.

5 MS. HANCOCK: Thank you.

6 THE COURT: And what number does it have besides
7 392?

8 MS. HANCOCK: Your Honor, this is not a National
9 Milk exhibit. This is the U.S. Department of Agriculture
10 Report to Congress, and so I don't have a National Milk
11 exhibit number on it.

12 THE COURT: All right. No need.

13 (Thereafter, Exhibit Number 392 was marked
14 for identification.)

15 THE COURT: Very good. Now, does everyone have
16 one? All right. Good.

17 So, Ms. Hancock, would you just hold that up so
18 that the people who are watching online can see what we
19 have just marked.

20 All right. Ms. Hancock, you may proceed.

21 MS. HANCOCK: Thank you.

22 BY MS. HANCOCK:

23 Q. Dr. Capps, is Exhibit 392 the document that you
24 were referring to when you said that you have a
25 peer-reviewed quarterly evaluation of the U.S. Dairy
26 Programs that you published in September of 2023?

27 A. Well, the content is similar. I think the date
28 September 2023, that didn't come from me. And even



1 allowing for that, the most recent report to Congress has
2 quarterly data from 1995 to 2021.

3 But to answer your question, this one was
4 peer-reviewed. I don't know where the "September 2023"
5 date came from. It didn't come from me.

6 Q. Okay. So other than the notation at the bottom
7 that says "September 2023," did the other parts of this
8 come from you?

9 A. Not -- not the entire report.

10 Q. Okay. Let's turn to page 13, where Chapter 3
11 begins.

12 A. Yes.

13 Q. Did you author Chapter 3 of this report in
14 Exhibit 392?

15 A. Just give me a moment to look through it. Okay.

16 THE COURT: Let's go off record while we all take
17 a look at this. This is data-packed.

18 (An off-the-record discussion took place.)

19 THE COURT: Let's go back on record.

20 We're back on record at 3:59.

21 Dr. Capps, you were saying?

22 THE WITNESS: It is a summary of the 2020
23 quantitative evaluation of the effectiveness of the dairy
24 and fluid milk promotion programs. But, once again, it's
25 not the most recent.

26 BY MS. HANCOCK:

27 Q. Meaning not the most recent because this goes
28 through 2020?



1 A. The data run through 2020. The most recent is
2 2021.

3 Q. Okay. This is the most recently published version
4 of this document; is that correct?

5 A. Well, I don't know. It depends on who published
6 it. But I'm telling you it's not the most recent report
7 that I handed over to AMS.

8 Q. Okay. Are you aware of whether there has been
9 anything more recently published after what we have marked
10 in Exhibit 392?

11 A. Well, when I turn in my report to Congress, that's
12 technically what Chapter 3 is, and there's an accompanying
13 technical report that has all the details that Congress
14 doesn't want to see, or probably most others, too. But
15 those data run through 2021. I don't know who published
16 this. Presumably AMS. But when I hand over the report,
17 I'm under the presumption that ultimately it will be
18 published.

19 Q. Okay.

20 A. So I don't know, because I didn't check recently,
21 if the 2021 report or the most recent report has actually
22 been published.

23 If that -- if this is the most recent one that has
24 been published, I'll go with that. But I'll testify that
25 Chapter 3 is my work.

26 Q. Okay. When you say Chapter 3, you mean Chapter 3
27 in Exhibit 392 is your work?

28 A. Yes.



1 Q. And when did you turn in the version that would go
2 through 2021?

3 A. Turned it in April of this year, 2023. Then it
4 went through a peer-review process and was signed off on
5 after responding to comments made by AMS USDA in August of
6 2023. And that's with data running through 2021.

7 Q. Okay. So before we get there, I want to first
8 look at this one, and then we'll talk about the one that
9 goes through 2021; is that fair?

10 A. Do you have that report?

11 Q. I don't have it, but I'm guessing you know enough
12 about it we can talk about it.

13 A. Okay.

14 Q. Okay. So in this Chapter 3, you're providing an
15 overall analysis and evaluation of the U.S. Dairy Programs
16 effectiveness for helping to support the fluid milk
17 industry; is that right?

18 A. Yes.

19 Q. And --

20 A. And if I could add one more point, I'm sorry to
21 interrupt. This is my work, but also Scott Brown of the
22 University of Missouri was a partner with me, especially
23 in running simulations that are also reported in Congress.
24 So I just wanted to state that for the record.

25 Q. He will appreciate that. Thank you.

26 A. He's a good guy.

27 THE COURT: How is Brown spelled?

28 THE WITNESS: B-R-O-W-N.



1 THE COURT: Thank you.

2 BY MS. HANCOCK:

3 Q. And I just want to jump to the page 31 in your
4 Table 3 -- or 3-3, and this is the table that you use
5 where you include as part of the factors for consideration
6 in your evaluation, the own-price elasticity for the dairy
7 demand of fluid milk; is that right?

8 A. Just to be sure, we're talking about Table 3-3?

9 Q. Yes.

10 A. On page 31?

11 Q. On page 31.

12 A. Well, what is reported are not just the own-price
13 elasticity, but as I explained before break, the income
14 elasticity, but the most important element for this
15 analysis was the promotion elasticities.

16 Q. Right. I understand that you're also doing
17 promotional elasticities for purposes of this report.

18 My question was: Included in this table also is
19 your own-price elasticity of fluid milk that takes -- from
20 1995 up to 2020; is that right?

21 A. Yes.

22 Q. And as of 2020, for purposes of this published
23 report that was published in September of 2023, you
24 concluded fluid milk's own-price elasticity is negative
25 0.038?

26 A. Yes.

27 Q. And that would mean that that's inelastic by your
28 measure; is that right?



1 A. Yes.

2 Q. And would you consider that to be highly in- --
3 highly inelastic?

4 A. Yes.

5 Q. And you said that you had a report that you had
6 generated for 2021 activities. What was the own-price
7 elasticity for fluid milk in the report that went through
8 2021?

9 MR. HILL: Your Honor, this is Brian Hill. We're
10 going to object to this.

11 THE COURT: You are going to object to this line
12 of questioning?

13 MR. HILL: That is correct.

14 THE COURT: Oh, on what basis?

15 MR. HILL: Well, this is -- I'm assuming this is
16 contracted on our behalf, on the USDA's behalf. We have
17 chosen not to publish it at this point, and we don't think
18 this line of questioning should proceed.

19 MS. TAYLOR: Just on the 2021.

20 MR. HILL: Just on the 2021.

21 THE COURT: Oh. So what I have got in front of me
22 is okay?

23 MR. HILL: Correct.

24 THE COURT: Understood. All right.

25 So I -- I'm going to honor the objection.

26 MS. HANCOCK: It's super awkward for me, so I
27 will, too.

28 THE COURT: All right.



1 THE WITNESS: Could I add something, though?

2 MS. HANCOCK: I don't think so.

3 THE WITNESS: Okay. Not about the newest report.

4 But you have to understand, there's a -- the
5 reports to Congress have been going on for a long, long
6 time. Prior to 2011, when I initially got the contract
7 from AMS, the previous ten years the analyses were
8 conducted by Dr. Harry Kaiser.

9 And in putting together those reports, including
10 mine, there was agreement on what the structural
11 composition of the econometric model would be, given the
12 quarterly data, meaning we would agree on what the
13 explanatory factors were; own-price being one, seasonality
14 being another, income, ages of preschool, preadolescent,
15 and adolescent, or the percentages of the population that
16 fell into those categories; the percentage of foods eaten
17 away from home. I could go on and on.

18 In other words, the structure of the model didn't
19 change. And, again, even if I wanted to change it, there
20 was inertia there.

21 But as I testified before break, we couldn't
22 change that anyway because with the data that we have,
23 particularly with the emphasis on advertising and
24 promotion expenditures being quarterly, and the lack of
25 data that we currently see in a retail marketplace on a
26 quarterly basis going back to 1995.

27 So, you know, there's a bit of inertia, you know,
28 we're locked into a structural change -- I mean, a



1 structural composition of the econometric model. I'm not
2 unhappy with that, but at the same time, I just wanted to
3 emphasize there wasn't a whole lot of flexibility.

4 We had it in the most recent report, variables
5 concerning the pandemic. Other than that, the model
6 structure hadn't changed since 2011. And the actual
7 estimated parameters change a little bit, but we didn't
8 see that noted structural change that we saw during the
9 pandemic during my analysis, even over that period back to
10 2011. In other words, the model was fairly robust: Large
11 explanatory power; all coefficients being significant;
12 most important, the advertising and promotion
13 expenditures, elasticities being positive and
14 statistically different, meaning the National Dairy
15 Programs, despite the fact that per capita consumption of
16 fluid milk, for example, had been declining, was -- was
17 positive.

18 And when asked about that, you know, I view it
19 like a rock coming down the hill, you didn't completely
20 stop the rock, but you slowed it with advertising and
21 promotion expenditures. That would be the takeaway.

22 But we were -- the major point I'm trying to make
23 is that the structural econometric model is the same --

24 THE COURT: Stay close to the mic.

25 THE WITNESS: The structural integrity of the
26 model was the same across all of those years, even before
27 I had the project in 2011.

28 BY MS. HANCOCK:



1 Q. When you say the "structural integrity" of the
2 project, you mean the structural integrity of the process
3 you go through in order to generate this Chapter 3 each
4 year from 2011 to the present?

5 A. Especially for fluid milk.

6 THE COURT: Is the answer yes?

7 THE WITNESS: Yes.

8 THE COURT: And now you may say especially.

9 THE WITNESS: Especially for fluid milk. For some
10 of the other dairy products there are other things going
11 on. But fluid milk, you know, if you are -- since we're
12 emphasizing that, I want to make the point, that
13 structural model specification -- and what I mean by that,
14 the list of explanatory variables that are used -- very
15 much the same year after year.

16 BY MS. HANCOCK:

17 Q. And when you turn in your Chapter 3 each year, and
18 it's been, what, over 12 years now, when you turn this in
19 each year, you are intending for the information that you
20 provide to the USDA to be accurate; is that right?

21 A. Well, of course. You know, I stand behind it, the
22 data.

23 Q. And you've said that there's some inertia. I just
24 want to make sure we're clear on this.

25 You are not saying that anything you have included
26 in here is inaccurate or incomplete, are you?

27 A. All I'm saying is, especially for milk, the
28 structural -- the model specification --



1 THE COURT: Just a minute. Stop. First thing to
2 decide is whether to say to Ms. Hancock, "correct," if
3 that's true, and then you may explain.

4 THE WITNESS: Essentially you are correct, but I
5 want to say that the model specification for fluid milk
6 especially, pretty robust year after year since I had the
7 project for 2011, but even before that, based on the work
8 of Dr. Kaiser.

9 BY MS. HANCOCK:

10 Q. And if -- if this information that you were using
11 to include in this report needed to be updated or the
12 methodology changed, would you make that recommendation to
13 USDA?

14 A. Well, year after year, in fact, prior to coming
15 here, I received some updated information from Jill Hoover
16 for the next evaluation. So, yes. As a starting point,
17 I'll start with the structural specifications we have had
18 in the past.

19 But you have to be careful. Even though we have
20 been fortunate there hasn't been much structural change,
21 there's no guarantee that will continue going into the
22 future. So there's a lot of diagnostics that we use and
23 applied econometrics to make sure that's the case. And
24 any work that I would do, you know, I would always imagine
25 it would be -- I would desire it to be peer-reviewed, and
26 in these cases they have been.

27 Q. And have you ever made a recommendation to USDA
28 that they allow you to change your methodology that you



1 used to conduct the own-price elasticities for fluid milk?

2 A. Well, when Dr. Kaiser did the analysis, when it
3 came to the -- the econometrics part was very similar.

4 But this report in Chapter 3 also deals with a
5 simulation model, and I'm -- and I don't want to be too
6 technical here, but these are demand functions at the
7 retail level, or demand functions for exports. I feed
8 this information to Scott Brown who has an encompassing
9 model called the AMAP Dairy Sector Model, that goes from
10 producers, dairy producers, all the way to consumers. And
11 so ultimately, not only do we want to measure these
12 elasticities, we would like to put together a return on
13 investment for USDA.

14 So for every dollar coming from DMI, MilkPEP, or
15 qualified programs, how much are you getting in return?
16 In order to do that, you need an all-encompassing model
17 that takes into account supply shifts, demand shifts, and
18 ultimately gives you impacts on prices received by dairy
19 farmers, prices received at Class I, Class II, Class III,
20 I think we had a Class IV, wholesale prices for butter and
21 cheese, per capita consumption for fluid milk, cheese,
22 dairy, and nonfat dry milk. A host of things, they are
23 all listed here. That part of the report to Congress,
24 completely different from the methodology used by
25 Dr. Kaiser.

26 Q. Yeah. My question is just with respect to the
27 own-price elasticity that you have reported on page 31 of
28 Exhibit 392, have you ever made a recommendation to USDA



1 that you be allowed to change your methodology used to --
2 used to report the own-price elasticity in this report?

3 A. The only change I made this latest time is that
4 now we have data, because I went through 2021, where we
5 could talk about an additional explanatory variable, that
6 being affiliated with pandemic.

7 Q. And the USDA is not wanting us to talk about that
8 one, so I want to focus about what we have in front of us,
9 which is Exhibit 392.

10 Up through when you reported Exhibit 392, did you
11 ever ask to change the methodology that you used to
12 determine the own-price elasticity for fluid milk?

13 A. No.

14 Q. And do you believe, as you sit here today, that
15 the own-price elasticity that you have reported in
16 Exhibit 392 is accurate?

17 A. Again, yes. But in the context of a principal
18 question to be answered was the impact of advertising and
19 promotion. The main course was not about own-price
20 elasticity or income elasticity.

21 Q. So does the answer -- or does your evaluation and
22 conclusion about the own-price elasticity change depending
23 on who your audience is?

24 A. No. Depends on the question being asked and the
25 data being used.

26 Q. And the promotional elasticities are reported in
27 the prior two columns on page 31; is that correct?

28 A. Yes. For the whole period 1995 to 2020, because I



1 allowed the promotion elasticity based on my model
2 specification to change from year to year. So we were
3 able to compute averages of those elasticities, and then
4 since the last year associated with this report was 2020,
5 what the promotion elasticity was for 2020, the average-of
6 those four quarters.

7 Q. And so you reported that the promotional
8 elasticity for fluid milk from 1995 to 2020 is .055; is
9 that right?

10 A. That is correct, meaning a 1% change in promotion
11 dollars associated with fluid milk advertising and
12 promotion would lead to a .055% change in the quantity of
13 fluid milk.

14 Q. Okay. And then for 2020, you have a promotional
15 elasticity of .040; is that correct -- for fluid milk; is
16 that correct?

17 A. Yes.

18 Q. Okay. And then for own-price elasticity, that is
19 a standalone measure, is it? Is that correct?

20 A. Yes.

21 Q. And that one, as we have talked about, is negative
22 .038?

23 A. Yes. And in my model specification I didn't allow
24 the own-price elasticity or the income elasticity to
25 change over the time period.

26 Q. And that's because it's reported for the entire
27 time period between 1995 and 2020; is that correct?

28 A. Yes.



1 Q. Does that go to the end of the calendar year 2020?

2 A. It's quarterly periods, so through the end of the
3 calendar year.

4 Q. Okay.

5 A. So the data runs from the first quarter of 1995 to
6 the fourth quarter of 2020.

7 Q. If we look back at Exhibit 387, that's your
8 PowerPoint presentation on page 12, your pre-COVID period
9 that you selected in your testimony was January 8th of
10 2017 to March 15th of 2020; is that correct?

11 A. Yes.

12 Q. Okay. And so when you looked at the total fluid
13 milk here for that period, you have 1.10 elasticity; is
14 that right?

15 A. Yes.

16 Q. And that's different than what you have reported
17 in Exhibit 392 for a different time period; is that
18 correct?

19 A. Yes.

20 Q. And is that difference explained by the fact that
21 you have selected a different time period to evaluate?

22 A. Not alone.

23 Q. Is it also explained by the fact that you used a
24 data source set from IRI instead of the USDA data?

25 A. That's part of it, but also the frequency is
26 different. The frequency, as I have testified on the
27 report to Congress quarterly, the frequency here, weekly.

28 But there's also one added dimension. In the



1 report to Congress, there was no prices of juices, bottled
2 waters, sports drinks, protein beverages, plant-based milk
3 alternatives, or refrigerated yogurt. So the addition, if
4 you're trying to explain the difference, the addition is,
5 well, we have a different frequency, the main focus is on
6 own-price elasticity, and we have a detailed list of -- a
7 list of additional products that affect the demand for
8 either total milk or even the five milk segments done on a
9 weekly basis.

10 But to answer your question, the timeframe is also
11 different.

12 Q. Okay.

13 MS. HANCOCK: Let's go ahead and mark our next
14 exhibit. I believe it's 393.

15 THE COURT: Correct. And what does it look like?

16 MS. HANCOCK: December 14, 2022, PowerPoint
17 presentation, "What's Going on With Milk?"

18 THE COURT: All right. It looks like this
19 (indicating), Ms. Hancock?

20 MS. HANCOCK: Yes.

21 THE COURT: Would you hold it up for the viewing
22 audience? Except you have got your sticky note on it.
23 Don't want to give your trade secrets away.

24 Thank you. All right. So this one is 393.

25 (Thereafter, Exhibit Number 393 was marked
26 for identification.)

27 BY MS. HANCOCK:

28 Q. Dr. Capps, are you the author of the presentation



1 that we have identified as Exhibit 393?

2 A. I'm one of the authors.

3 Q. Okay. If you go on the third page, there's three
4 of you there.

5 Are those the other two authors of this
6 presentation?

7 A. The -- Doug Adams was a -- an intermediary between
8 Dr. Ishdorj and I and IDFA. But the authors are
9 Dr. Ishdorj, who I mentioned before, and myself.

10 Q. And when you said that you were initially hired
11 along with Dr. Ishdorj, is this presentation part of what
12 you were initially hired to do for IDFA?

13 A. Yes.

14 Q. So this is some of the preliminary work that you
15 did in order to do the elasticity analysis for IDFA?

16 A. Yes.

17 Q. And if we turn to page 4, you initially did your
18 work using both the USDA -- I'm sorry, let's -- it's
19 page 2. I apologize.

20 A. Page 2?

21 Q. Yeah. If we can look at the specific objectives.

22 A. Uh-huh.

23 Q. I think you had testified earlier that it's
24 important to first identify what the question is that you
25 are asked to do?

26 A. Yes.

27 Q. Is that what you have identified here, the items
28 that you and Dr. Ishdorj were asked to perform for IDFA?



1 A. Yes.

2 Q. And one of them was to estimate own-price
3 elasticities for milk for the 11 Federal Milk Marketing
4 Orders using the USDA's data.

5 Is that what number one is referring to?

6 A. Yes.

7 Q. And then the next one in number 2, estimate the
8 own-price, cross-price, total expenditure, and income
9 elasticity using the IRI; is that correct?

10 A. Yes.

11 Q. And then number 3, to provide detailed literature
12 of the demand for fluid milk and milk-related products; is
13 that correct?

14 A. Yes.

15 Q. And did you perform all three of those
16 objections -- objectives for IDFA?

17 A. Our team did.

18 Q. Okay. The "team," meaning you and Dr. Ishdorj?

19 A. Yes.

20 Q. And your testimony that you have provided today
21 that is in Exhibit 387 for the PowerPoint presentation,
22 and your testimony which is Exhibit 386, is that the
23 culmination of the work as you have done for IDFA?

24 A. Yes. And this -- to add a clarification, in -- I
25 forgot the number now for the new PowerPoint that I
26 received?

27 Q. 393.

28 A. Okay. In 393, when I used the IRI data, I used



1 the same commodities, but we didn't have a
2 moving-past-COVID period.

3 Q. Okay. And I didn't see that you had used the USDA
4 data in your recent PowerPoint presentation that we have
5 been talking about today.

6 Did you include any of that initial work that you
7 did analyzing the USDA data in your elasticity analysis?

8 A. No.

9 Q. Why not?

10 A. Well, as I stated in my testimony with my
11 PowerPoint, to get a clear picture of what's happening at
12 the retail sector, you need a breakdown of the fluid milk
13 categories. And we don't need to go through those, I
14 think you know them now. Also, the alternative beverages
15 and yogurt. But the AMS USDA data includes information on
16 total milk and organic milk only, and because of that
17 limitation, I think, and also the difference in frequency,
18 and the consumer driving things, I think a better picture
19 of the own-price elasticity, just concentrating on that,
20 is based on the testimony from my PowerPoint, Exhibit 386.

21 Q. And that only relies on the IRI data?

22 A. Yes.

23 Q. Did you leave out the USDA data results because
24 they showed that fluid milk was inelastic?

25 A. No. In the contract with IDFA, the question that
26 was begged, as I testified earlier, what happens after we
27 move past COVID? And that was the question that needed to
28 be addressed. And so the focus was going back to the IRI



1 data and adding the weekly data from May 22 of 2022 to
2 August 13 of 2023.

3 Q. Did you present Exhibit 393 to IDFA?

4 A. Everything in the report that Dr. Ishdorj and I
5 did was delivered to IDFA.

6 Q. I'm specifically talking about Exhibit 393. It
7 looks like it's a PowerPoint to me. I'm just wondering,
8 is this a presentation that you gave to IDFA?

9 A. You are talking about this document (indicating).

10 Q. Yes, "What's Going on With Milk?"

11 A. Yes, the PowerPoint presentation was made via
12 Zoom, a number of people, and also a written report was
13 delivered to IDFA.

14 Q. A written report that's different than the one
15 that we have today; is that right?

16 A. The -- yes. Because this report here only focuses
17 on the IRI data with the added weeks that I just
18 mentioned.

19 Q. Let's turn to page 4. This is Exhibit 393. This
20 is your December presentation to IDFA.

21 Do you know who attended that presentation?

22 A. I couldn't tell you.

23 Q. Do you know how many people were on the Zoom?

24 A. There were more than I expected.

25 Q. Is that more than 20?

26 A. I have no idea. I didn't count. I was so
27 concentrated on making the presentation, I really don't
28 know.



1 Q. Okay. And then on this page 4 you state, "The
2 primary motivation for the consideration of the USDA AMS
3 data is to draw comparisons to the IRI analysis and to
4 shed light on the non-retail components of fluid milk
5 sales."

6 Was that an accurate statement when you made it?

7 A. Nothing has changed. It was accurate. It is
8 accurate.

9 Q. And the USDA data would provide insight into the
10 non-retail component of fluid milk sales; is that correct?

11 A. Yes. And as I testified when we were talking
12 about coverage of the retail data, we said -- I stated
13 that roughly 76% of the retail -- retail marketplace was
14 captured by IRI, but in the USDA data you have all these
15 other places, schools, for example, foodservice industry,
16 everything that I mentioned before.

17 Q. And if I understood how the math works here, that
18 with elasticity, one of the benefits is that it's not a
19 weighted average and it's not dependent on volumes; is
20 that correct?

21 A. Well, elasticity is a unitless measure, but in
22 order to calculate it, you need volume, you need prices,
23 et cetera.

24 Q. But is it fair to say, then, that you could
25 combine two data sets, such as the IRI and USDA's
26 elasticity results, and one would not dilute the other?

27 A. Incorrect.

28 Q. If --



1 A. You cannot combine them.

2 Q. Okay.

3 A. Totally different set of entities.

4 Q. So would you have to measure them separately to be
5 able to look at the retail versus non-retail?

6 A. Well, the USDA data is not exclusively non-retail.
7 They just happen to include foodservice, schools,
8 et cetera, that retail doesn't. And the reason you can't
9 combine them, you know, as I have stated already, in the
10 IRI data, the set of additional factors that you bring in
11 to the analysis, you are able to do so, but you cannot
12 with the USDA data.

13 So, in fact, another reason for drawing these
14 comparisons is to determine why you get such differences,
15 and I think I have explained that.

16 Q. And the USDA data would include both retail and
17 non-retail because it's just the total fluid milk that is
18 reported to the USDA?

19 A. Yeah. That -- as I state here, they correspond to
20 deliveries or dispositions of fluid and milk products, you
21 know, from milk processing bottling plants to various
22 outlets in Federal Milk Marketing Orders, 11 of them.

23 Q. And the USDA has its data available for post-COVID
24 as well; is that right?

25 A. Oh, yes.

26 Q. I didn't hear what you said. What was the first
27 word you said?

28 A. Oh, yes.



1 Q. "Oh, yes." Okay.

2 A. But only -- but only for milk and perhaps organic
3 milk, maybe a little flavored milk. But for the national
4 level, you can get a more detailed breakdown, but not so
5 at a regional level.

6 Q. Okay. And then if we just turn to page 9 -- no,
7 let's go right to page 10. I apologize.

8 Your December of 2022 report to the IDFA members
9 reported that the own-price elasticity using the USDA data
10 was negative .24; is that right?

11 A. Yes.

12 Q. And that would be highly inelastic; is that
13 correct?

14 A. It would be inelastic.

15 Q. Well, I thought you just told me that negative
16 .038 would be -- oh, I guess because of the zero. Never
17 mind. I answered my own question.

18 So this would -- the total milk elasticity that
19 you have reported to IDFA members in December of 2022 was
20 that it would be inelastic; is that correct?

21 A. On page 10?

22 Q. Correct.

23 A. Total milk, negative .24, yes.

24 Q. What's the time period that you were evaluating
25 here?

26 A. 2017 to -- January of 2017 to August of 2022.

27 THE COURT: I'm sorry, I'm lost. So I found the
28 right numbers on page 10, but they are about bottled



1 water. So which paragraph is the milk in?

2 MS. HANCOCK: Page 10 in Exhibit 293 -- or 393.

3 THE COURT: Oh, wrong exhibit. Got it. Thank
4 you.

5 MS. HANCOCK: I was concerned because I didn't see
6 water.

7 THE COURT: Okay. Thanks.

8 BY MS. HANCOCK:

9 Q. Okay. So just to be clear, you concluded that the
10 time period from 2017 to August of 2022, using the USDA's
11 data, that total milk was inelastic at negative .24?

12 A. Based on the use of the month, yes, based on the
13 use of the monthly USDA data from AMS.

14 Q. Okay. And if we turn to the next page on page 11,
15 you broke it down by region as well; is that correct?

16 A. Yes.

17 Q. By each of the orders?

18 A. Yes.

19 Q. And for every single one of those orders, it's
20 true that using the USDA data, that total milk is
21 inelastic?

22 A. Yes.

23 Q. And then the next section of your presentation
24 goes into the IRI analysis; is that right?

25 A. Yes.

26 Q. The -- and if we go to page 15, this is where you
27 reported elasticity using only the IRI data; is that
28 right?



1 A. Yes.

2 Q. And you have a pre-COVID period and a
3 COVID-affected period?

4 A. But no moving-past-COVID period.

5 Q. Yeah. You hadn't yet conducted the third
6 analysis; is that right?

7 A. Right.

8 Q. So -- but this was your initial report as of
9 December of 2022, and so here you only have the two time
10 periods; is that right?

11 A. Yes.

12 Q. And so you have concluded that using just the IRI
13 data, it's 1 -- negative 1.10 for total milk, which is
14 what you reported today; is that right?

15 A. Yes.

16 Q. And that is what you said what made it elastic,
17 correct?

18 A. Yes.

19 Q. And then for the COVID period here, you had
20 negative .40 showing that it had become inelastic for
21 total fluid milk.

22 A. Yes.

23 Q. And then, if we move forward to the end of the
24 your presentation, you have a meta-analysis on page 20.

25 Do you see that?

26 A. Yes.

27 Q. What is a meta- -- systematic review and
28 meta-analysis?



1 A. A meta-analysis takes a look at entities like
2 own-price elasticities that are reported across studies,
3 and they are put together in a separate statistical
4 analysis. That work was done by Dr. Ishdorj.

5 Q. Okay. And does that just combine the USDA
6 elasticity and the IRI elasticity information?

7 A. Well, as -- no. What -- no, it doesn't. As it's
8 stated on page 20, these elasticities come from 37
9 existing reporting studies of own-price elasticities for
10 milk, not counting the IRI data, not counting the AMS
11 own-price elasticities.

12 Q. Okay. And so then you took those 37, and you
13 create -- you analyze all of those together to create a
14 consolidated dataset to see what the effect is; is that
15 right?

16 A. That's correct.

17 Q. And so you have here, from those 37 existing
18 studies that were reported, the own-price elasticity for
19 milk ranged from negative 2.41, zero.

20 Can you explain what that measure there shows for
21 that range?

22 A. Exactly what it states. The range of elasticities
23 was bounded below by negative .241 and bounded above by
24 zero.

25 Q. And then the median value of all of those combined
26 was negative .236?

27 A. Yes. There were 37 studies, but there were 66
28 elasticities. So you have a list of the elasticities; the



1 median is the 50th percentile.

2 Q. And so using all 37 of those studies and the 66
3 elasticities, you concluded that the median value was
4 negative .236; is that correct?

5 A. Yes.

6 Q. And that would be inelastic?

7 A. Yes.

8 Q. And then you go on to say, "The overall white milk
9 elasticity from meta-analysis of the data from 18 existing
10 studies was estimated to be negative .37."

11 Is that correct?

12 A. Yes.

13 Q. And then what follows there is the calculation of
14 how you reached that negative .37?

15 A. No, it's a confidence interval, 95% confidence
16 interval.

17 Q. Okay.

18 A. If -- in other words, what we would attach is with
19 95% confidence, the own-price elasticity for white milk
20 would range from negative .15 to negative .59.

21 Q. Okay.

22 A. Again, based only on these 37 studies, not based
23 on my work.

24 Q. Okay. Understood.

25 So what you are concluding at the end of your
26 presentation in December of 2022 to IDFA, is that with
27 95% certainty, fluid milk price is inelastic in that range
28 between negative .59 and negative .15?



1 A. Yes. 95% confidence zone.

2 Q. Yeah. 5% chance you are wrong, 95% chance you are
3 right. That's what you were telling IDFA; is that right?

4 A. If we were able to repeat this for 18 other
5 existing studies with 95% confidence, we'd expect that
6 range to be between negative .15 and negative .59.

7 Q. And so no matter what your confidence level within
8 that range, that entire range means that fluid milk prices
9 are inelastic; is that right?

10 A. That's the conclusion that was reached.

11 One other point to make on that. We also state
12 these elasticities were all pre-COVID. And as I stated in
13 my own testimony, those pre-COVID studies from which these
14 are coming do not capture what is currently occurring to
15 consumers in the retail marketplace. I hate to be
16 repetitive, but that's important.

17 And the other point that we make here, if you look
18 at flavored milk, they are elastic even with these 37
19 existing studies, and for organic, the range is even wider
20 from negative .63 to negative 4.22.

21 MS. HANCOCK: We're going to mark another exhibit
22 really quick.

23 THE COURT: So now this one is -- so we have
24 marked 393, so this new one will be 394. What does it
25 look like?

26 MS. HANCOCK: It has a blue page on the front, and
27 it's is titled "A Deeper Look at Milk and Competing
28 Beverage Price Elasticities."



1 THE COURT: Thank you. So that's been marked 394.
2 (Thereafter, Exhibit Number 394 was marked
3 for identification.)

4 BY MS. HANCOCK:

5 Q. Dr. Capps, Exhibit 394, is this the report that
6 you and Dr. Ishdorj prepared for IDFA on or around
7 March 23rd of 2023?

8 A. Yes.

9 Q. And does this follow the presentation that we
10 looked at in Exhibit 393?

11 A. Yes.

12 Q. If we look at the third page in, Roman Numeral
13 iii, or Romanette, I guess, Roman Numeral iii, this is
14 where you have a Table ES1 that captures the price
15 elasticity findings of you and Dr. Ishdorj as of
16 March 23rd of 2023?

17 A. Yes.

18 Q. And here you have a total milk that you have
19 reported as negative 1.097 for pre-COVID time period?

20 A. Yes.

21 Q. And is this based on the IRI data?

22 A. Yes.

23 Q. And does it take into account at all any of the
24 USDA data?

25 A. No USDA data was involved.

26 Q. Okay. In this report that you and Dr. Ishdorj
27 generated for IDFA in Exhibit 394, do you anywhere in here
28 utilize any of the USDA data?



1 A. I believe we did toward the end.

2 Q. If you look at page 48.

3 A. Actually earlier than that. If you look at
4 page 42 where it starts, "Analysis of the USDA data from
5 the AMS."

6 Q. That's where that section starts, and then the
7 summary chart is on page 48; is that right?

8 A. I know you are right.

9 Yes.

10 Q. And, again, using that USDA data, your own-price
11 elasticity concludes that total milk is inelastic?

12 A. Yes.

13 Q. And that's that negative .2372?

14 A. Yes.

15 Q. And that's even including the seasonality monthly
16 breakdown that you have in that table?

17 A. Yes. The list of explanatory factors are listed
18 in Table 39.

19 Q. And that is reported for the period between
20 January of 2017 and March of 2022?

21 A. I thought it was August. Well, no, you are right,
22 March 2022.

23 Q. I'm just reading that off the legend on the
24 bottom.

25 A. It's right, March 2022.

26 Q. Okay.

27 A. But notice, though, in this table what's missing.

28 All the other, you know, actors that we have identified as



1 significant statistically influencers of the demand, not
2 only for total milk, but organic milk, traditional white
3 milk, and traditional flavored milk.

4 Q. You mean the non-dairy products; is that what you
5 mean?

6 A. Yes.

7 Q. Okay. And at least for purposes of this March of
8 2023 report, you were still including this information to
9 IDFA; is that right?

10 A. I didn't understand the question, I'm sorry.

11 Q. Yeah. Even up until March of 2023 you were still
12 including this own-price elasticity in Table 39 on page 48
13 to the IDFA?

14 A. Well, this whole report was sent to IDFA.

15 Q. And this table you prepared knowing that it didn't
16 include those non-dairy products; is that right?

17 A. Yes. Because we didn't have access to them.

18 Q. Okay. And it was some time thereafter that you
19 obtained an additional report from the IRI that gave you
20 access to that additional information?

21 A. Not concerning the USDA data, but the additional
22 information concerning the moving-past-COVID period.

23 Q. Okay. And -- and then between then and when you
24 generated your testimony that you provided today in
25 presentation Exhibit 387, and your written statement in
26 Exhibit 386, you dropped the "USDA" data from your report;
27 is that right?

28 A. I didn't include it because, as I mentioned, the



1 main focus was on the own-price elasticity as what's
2 happening in the current retail marketplace. The AMS data
3 does not deal with that issue.

4 Q. Okay.

5 A. There's not enough of a breakdown, you know, to
6 capture all five segments that I mentioned are important.

7 And by the way, I don't know if I, on record,
8 mentioned this, but it's important to include those other
9 alternative beverages and yogurt, because in the Barten
10 Model, their coefficients associated with the prices of
11 these are statistically different from zero, meaning they
12 are just not some whim that based on the other studies,
13 well, maybe we should throw them in there. We actually --
14 you know, as has been talked about, they are significant
15 influencers of either total milk or the five milk segments
16 that I have listed.

17 Q. And -- but the USDA data is good enough to report
18 it in a peer-reviewed publication to Congress; is that
19 right?

20 A. Well, I did report it. Yes, I did report it to
21 Congress. But there, again, the issue was, what is the
22 impact of the advertising and promotion programs.

23 Q. And when you were first hired by IDFA, you
24 reported it to IDFA as well; is that right?

25 A. When I was first hired by IDFA, the next part of
26 the question was?

27 Q. Yeah. You reported the elasticity using USDA's
28 data showing that it was inelastic, fluid milk was



1 inelastic; is that right?

2 A. That was part of the initial contract between
3 Dr. Ishdorj, I, and IDFA.

4 Q. And then when you did a subsequent follow-up
5 publication in March of 2023 in Exhibit 394, you again
6 used that USDA data to report on the elasticities of fluid
7 milk; is that right?

8 A. No. The updated contract with IDFA was to add
9 additional data concerning IRI or Circana only and the
10 moving-past-COVID period.

11 Q. Until you had authored your most current
12 testimony, are you aware of any time that you have ever
13 previously concluded that fluid milk was elastic?

14 A. I would have to check my records. Most of the
15 previous studies showed inelastic demands.

16 Q. Okay.

17 MS. HANCOCK: I have no further questions. Thank
18 you for your time.

19 THE COURT: I need a bit of input from the group.
20 We have 11 minutes before we stop for the day. How do you
21 want to use it?

22 Let's get the Agricultural Marketing Service mic
23 on.

24 MS. TAYLOR: I think AMS would just advocate we
25 plan for tomorrow and start fresh at 8 o'clock.

26 THE COURT: Does anyone object to that?

27 No one does.

28 Dr. Capps, I'm going to leave you sitting right



1 there while we discuss tomorrow. I know you will be part
2 of that discussion.

3 Ms. Hancock, how would you like to proceed
4 tomorrow?

5 MS. HANCOCK: I don't want to lose sight of having
6 the exhibits admitted that I had offered, so I'll just put
7 an asterisk there. We can hold until tomorrow as well if
8 you prefer.

9 MS. TAYLOR: If I could just add to that. We have
10 had some network USDA issues, which is why they have not
11 been on the web yet. We're working on that. We're going
12 to post them under -- with some NMPF exhibit numbers,
13 whatever is next on your list, I don't know what they are.
14 But I'll have those numbers in the morning, and maybe we
15 just pick up first thing, and that way we have all right
16 numbers in the record.

17 MS. HANCOCK: Yeah. So then we'll just provide an
18 update on what we're thinking for witnesses. We talked
19 last night amongst our team to try and speed things up a
20 little bit.

21 We are not going to put on Christian Edmiston and
22 John Kang, so we're cutting two witnesses. I thought we
23 would be a little bit further this week, and we're trying
24 to get done.

25 So our lineup for tomorrow, after we finish
26 Dr. Capps, is to proceed with Mike Herting, Monty
27 Schilter, Brad Park, Steve Stout. We have Dr. Vitaliano,
28 who we had remaining cross on, which may be very limited



1 at this point, but we would offer him up if we had any
2 remaining room, which my team assures me is way too
3 optimistic.

4 And I know several of you have asked about
5 Dr. Scott Brown. He is -- we had originally thought we
6 could get to him tomorrow, but we've had to jockey his
7 schedule around. So we will plan on him testifying firmly
8 on Wednesday, which might be well after we're done, so I'm
9 just saying that out loud now in case there's other
10 witnesses that MIG can plan for in between there. It's
11 not really dependent on his testimony. And we told Jeff
12 Sims if he went home, we would get him in on Monday. And
13 then we still have Ed Gallagher.

14 And then that will conclude everyone that we have
15 on Proposal 19. So we are anticipating being done by
16 Monday.

17 THE COURT: Except for Scott Brown?

18 MS. HANCOCK: Yes, but he's -- yes. Correct.

19 MS. TAYLOR: And on my list I had a Carl Rasch.
20 Is he not testifying as well?

21 MS. HANCOCK: We had cut him from a prior topic --

22 MS. TAYLOR: Okay.

23 MS. HANCOCK: -- for the same thing. He might
24 come back as a rebuttal at some point, but not on any
25 proponent topics. That's our full list.

26 THE COURT: Did anybody need any of those names
27 repeated? Do you know who to anticipate? Okay.

28 Mr. English.



1 MR. ENGLISH: So the last four weeks we've had
2 communications, bu I absolutely agree with National Milk
3 they have the right, the need to get their testimony done.

4 We thought based upon that the Tuesday was not
5 available, and so there were witnesses who were available
6 Tuesday who were told to come in January. So we will do
7 our best to see what we can do to try to fill slots.

8 I will say, and I just don't know how long, there
9 is a dairy farmer who is planning on coming Wednesday.
10 Dairy farmers, to my mind, still get priority.

11 THE COURT: Who is coming on Wednesday?

12 MR. ENGLISH: Wednesday. His name is Mike Sumners
13 from Tennessee. He has been a witness at other
14 proceedings.

15 THE COURT: And how do you spell his last name?

16 MR. ENGLISH: S-U-M-N-E-R-S.

17 I do not believe his testimony will be very long.

18 Again, I can tell you that we will do our best
19 between IDFA and ourselves to see what we can do about
20 Tuesday, but I note that there were communications about
21 this issue, expressly about Tuesday, and we were told not
22 to bring witnesses Tuesday, and so we told them not to
23 come to Tuesday, and I can't promise you now that we can
24 get them here Tuesday.

25 MS. HANCOCK: I would like to respond to that.

26 MR. ENGLISH: I'm not accusing you of anything.

27 THE COURT: Well, let me just ask Ms. Hancock: Of
28 those people on your list for tomorrow, which is Friday,



1 who don't fit tomorrow, are any of them available on
2 Tuesday?

3 MS. HANCOCK: They will probably come back for
4 Monday. They have been all hanging out for weeks. I
5 mean, we have never said don't have anybody ready for
6 Tuesday. We just said, stop giving your people firm dates
7 in front of our dates because we're having to balance all
8 the schedules, and our folks are just sitting here for
9 weeks at a time. We have really made a considerable
10 effort having people sit here for full weeks, waiting to
11 go on in case there's a gap.

12 THE COURT: Well, it's not like there was nothing
13 to listen to.

14 MS. HANCOCK: Well, it's very expensive for these
15 companies to have their employees sitting here, and then
16 traveling back and forth because they have to leave for
17 meetings. So it has been with considerable expense that
18 our clients have had their employees here, oftentimes
19 leaving and coming back. And we have managed our own
20 schedule to fill our own gaps, and that means that we have
21 had to have them sitting here waiting to go on. We have
22 never said that somebody shouldn't come on Tuesday. We
23 just said we're not going to delay our witnesses further
24 to allow other people, because it has cost us a lot doing
25 that, such as Dr. Capps. We have to have our people wait
26 around.

27 So I would hope that we're not going to have a gap
28 on Tuesday, considering it is Thursday and we have given



1 everybody our full list.

2 THE COURT: Okay. Well, I have been delighted at
3 how somehow it's all worked out. The invisible hand. All
4 right.

5 We still have five minutes. Does anyone want to
6 speak?

7 No one? I will see you all at 8 o'clock tomorrow
8 morning. We are now in recess at 4:56.

9 (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: January 9, 2024

11 FRESNO, CALIFORNIA

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16 MYRA A. PISH, RPR CSR
 17 Certificate No. 11613

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