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

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IN CHRONOLOGICAL ORDER:

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THURSDAY, NOVEMBER 30, 2023 -- MORNING SESSION

THE COURT: Let's go back on record.

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

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

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

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

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

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

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

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

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

MS. TAYLOR: Yes.

THE COURT: Very good.

Would you please state and spell your name.

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

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

THE WITNESS: That is correct.

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

THE WITNESS: Correct.

THE COURT: Thank you.

Have you previously testified in this proceeding?

THE WITNESS: I have not.

THE COURT: I would like to swear you in.

GEOFF VANDEN HEUVEL,

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

THE COURT: You may proceed.

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

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

today.

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

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

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

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

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

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

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

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

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

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

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

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

In a normal business relationship, sellers do not

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

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

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

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

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

Grade A milk prices in the FMMO system.

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

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

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

point.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

incentivized in close to realtime.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

That concludes my prepared testimony, Your Honor.

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

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

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

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

MR. ENGLISH: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. ENGLISH:

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

A. Good morning, Mr. English.

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

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

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

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

A. Probably was.

THE COURT: Your voice isn't loud enough.

THE WITNESS: Probably was.

THE COURT: Good. Good adjustment. Thank you.

BY MR. ENGLISH:

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

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

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

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

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

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

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

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

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

A. Correct.

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

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

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

A. A long time.

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

A. Absolutely.

Q. -- correct?

A. Yes. Absolutely. Yes, I was.

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

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

Q. Yes.

A. Almost all of it.

Q. Was pooled under the state order, correct?

A. Yeah, under the state order, yes.

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

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

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

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

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

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

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

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

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

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

THE COURT: They all have to remain competitive what?

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

BY MR. ENGLISH:

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

A. Correct.

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

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

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

THE COURT: And what was the other way?

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

BY MR. ENGLISH:

Q. Is that healthy for Class I?

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

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

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

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

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

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

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

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

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

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

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

A. How important is it?

Q. Yes.

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

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

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

Q. You are retired from the milking portion, correct?
A. That's true.
Q. When you were, before you retired, what considerations did you make when deciding whether you were going to ship to a fluid processor or manufacturer?
A. What considerations?
Q. Yes.
A. I shipped to Alta Dena Dairy back in the day when it was owned by Deans, and felt very good because it was a dairy that cared about your health, and that was their tag line. I was very proud to ship to Alta Dena Dairy, you know, and they paid pretty well. And so that's -- you know, you asked me why I did what I did. I -- I worked hard to get a contract with them and to sell them good quality milk.
Q. How far was your farm from Alta Dena?
A. Around 25 miles.
Q. Were they your closest outlet?
A. They were -- yeah. I mean they were LA, LA County. I was San Bernardino County.
Q. Did they pay a premium over the Class I price?
A. Yeah. They paid a premium for being BST-free back in the day, which was an important thing to me, and to them obviously.
Q. And those premiums were important to you for making your decision to shipping to them?
A. Sure.
Q. So speaking about LA, the plurality of population

in California is in Los Angeles, right? Correct?

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

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

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

Q. Well, let's use LA County.

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

Q. How about the milk production in Southern California?

A. That's leaving. Dramatically being diminished.

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

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

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

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

Q. But you were independent shipper, correct?

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

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

A. Yes, I believe there are.

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

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

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

A. At various times in my career there were.

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

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

Q. Thank you.

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

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

A. I do not know that.

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

A. I do not know that.

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

A. Correct.

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

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

Q. And how do they do that supplement?

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

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

A. Yes.

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

same components?

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

Q. It's a pleasure seeing you again.

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

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

CROSS-EXAMINATION

BY MR. ROSENBAUM:

Q. Steve Rosenbaum for the International Dairy Foods Association.

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

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

A. Correct.

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

A. Correct.

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

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

A. Correct.

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

A. Correct.

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

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

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

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

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

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

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

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

A. It was a freak show.

Q. A freak show?

A. A freak show.

Q. All right.

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

Q. I don't --

A. I got a smile out of you.

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

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

A. Yes.

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

Make Allowances?

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

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

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

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

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

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

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

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

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

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

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

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

A. Right.

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

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

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

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

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

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

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

A. Yes.

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

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

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

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

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

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

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

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

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

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

A. Yes.

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

What is the national all-milk price?

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

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

A. Correct.

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

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

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

Q. Go ahead.

A. "Definition: The mailbox price" --

THE COURT: Go slowly, please.

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

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

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

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

BY MR. ROSENBAUM:

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

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

A. Correct.

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

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

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

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

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

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

Is that a fair characterization?

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

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

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

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

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

A. That's the argument.

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

A. Yes.

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

A. Right.

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

A. Right.

Q. Okay. So the order system already captures the

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

A. Correct.

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

A. Sure.

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

A. Well, that is a question, yes.

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

A. Correct.

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

A. Sure.

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

A. Sure.

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

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

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

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

A. That could be.

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

A. I'm unaware of it.

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

A. I believe.

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

A. Yes.

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

A. That's not the question.

Q. You have articulated --

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

what he just asked.

THE WITNESS: Well, go ahead and ask it.

BY MR. ROSENBAUM:

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

A. That is the question.

Q. Okay.

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

We go off record at 9:14.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record.

We're back on record at 9:30.

Do you remember where you were?

MR. ROSENBAUM: I believe I do.

THE COURT: You may proceed.

BY MR. ROSENBAUM:

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

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

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

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

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

A. Okay.

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

A. Correct.

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

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

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

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

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

protein, correct?

A. Hence, Proposal 1 and 2.

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

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

Continue, Mr. Rosenbaum.

BY MR. ROSENBAUM:

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

Do you know that?

A. I do not know that.

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

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

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

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

Q. Well, that's what MPC --

A. MPC is standing for?

Q. Yeah, okay. Multiple --

A. Not Milk Producers Council.

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

A. Correct.

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

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

Q. Surely not on that ground.
A. Well, they weren't happy with the way things were going, and they voted it out.
Q. I mean, most Federal Orders have adopted multiple component pricing?
A. Well, that's the one you chose to bring to my attention.
Q. Well, okay. Do you have any basis to believe that it is that aspect of the Federal Order system that led to that order being depooled?
A. Well, they were very unhappy with the way the whole system was working, including Class I price levels and their ability to get it and all kinds of things. But it certainly didn't help.
Q. That's all I have.
MR. ROSENBAUM: Thank you.

CROSS-EXAMINATION

BY MR. MILTNER:
Q. Good morning, Mr. Vanden Heuvel.
A. Good morning, Ryan.
Q. I'm Ryan Miltner. I represent Select Milk Producers.
So I wanted to talk specifically about your comments on Select's three proposals.
Before I do that, you mention that MPC is a producer trade association. Are the members of MPC also members of California's cooperatives?
A. Oh, yes.

Q. Are there any independent producers that are members of MPC?
A. There are some.
Q. The majority would be cooperative shippers, though?
A. Yeah. A majority of producers in California belong to cooperatives, so that's reflected in our membership.
Q. And of the cooperatives that operate in California, the three primary cooperatives are DFA, Land O'Lakes, and CDI, correct?
A. California Dairies, yes.
Q. Are there any other cooperative -- cooperatives, who have members that are also members of MPC, to your knowledge?
A. Well, depends on -- you know, there's -- there's a variety of, you know, paper cooperatives or cooperatives that exist, so, you know, we have some of those as members. But the vast bulk of our membership is a member in one of those three cooperatives.
Q. And those three cooperatives are also members of National Milk Producers Federation, correct?
A. Correct.
Q. And so those cooperatives had input into the National Milk process in developing their slate of proposals as you understand it?
A. I understand that to be the case.
Q. Do you know if any MPC members were part of the

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

A. I am unaware of that.

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

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

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

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

A. Yes.

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

A. Yes.

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

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

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

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

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

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

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

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

A. I didn't hear the question.

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

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

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

A. Uh-huh.

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

A. That's correct.

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

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

Q. And you testified at that point in support of

butterfat retention at 94%, correct?

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

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

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

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

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

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

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

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

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

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

A. That's mine.

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

A. Back when we were both younger, Ryan.

Q. We were all younger then, Geoff.

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

A. Yes.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Q. Understood.

A. Thanks, Ryan.

CROSS-EXAMINATION

BY MR. LAMERS:

Q. Mark Lamers, Lamers Dairy.

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

A. Oh, that will work, too.

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

Are you familiar with the Marketing Agreement Act of 1937?

A. Generally.

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

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

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

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

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

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

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

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

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

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

A. It is correct.

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

A. That may be a historical fact.

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

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

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

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

A. Well, have at it.

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

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

saying higher ahead is a higher price.

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

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

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

Would you agree with that?

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

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

A. Does that surprise you?

Q. But is it necessary?

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

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

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

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

Q. Okay.

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

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

CROSS-EXAMINATION

BY DR. CRYAN:

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

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

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

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

A. And it was a privilege.

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

How does that -- how is that a complication?

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

seems a bit redundant.

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

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

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

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

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

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

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

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

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

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

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

You know, average costs -- I think you heard in my testimony, I'm a little concerned about all the weight that's being put on this audited study, like somehow or another that's going to then dictate what we do. Partly -- you know, one of the things about the California hearing process was it had all the trappings of a judicial type -- you know, there was a hearing officer. It was a Department -- California Department of Food and Ag that was a panel. Witnesses got up, they got sworn in. The

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

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

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

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

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

price.

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

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

Q. Okay. Thank you.

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

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

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

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

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

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

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

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

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

Q. Okay. Thank you.

And to be clear, Milk Producers Council supports

Proposal 21 to raise the Class II differential?

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

Q. Very good. You're very welcome.

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

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

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

CROSS-EXAMINATION

BY MS. TAYLOR:

Q. Good morning.

A. Good morning.

Q. Thank you for making the trip out here.

A. My pleasure.

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

About how many members does the organization have?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. Nope.

Q. -- that's contained. Okay.

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

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

BY MS. TAYLOR:

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

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

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

A. That's the difference.

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

A. Sure.

Q. Yeah, that would be helpful.

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

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

Q. The rolling average?

A. Correct.

Q. Okay.

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

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

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

Now, that -- what informs that on the cooperative

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

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

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

THE COURT: I'm so proud.

BY MS. TAYLOR:

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

A. Right.

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

A. Right.

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

A. Correct.

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

A. Correct.
Q. And so this seems to be -- we heard similar testimony comparing the mailbox prices and blends showing that that negative difference is indicating that manufacturing allowances are not adequate.
A. It certainly can point in that direction.
Q. Okay.
A. And -- right. So the reason for this chart, and bringing this to your attention is, to put some parameters around it. Because you can see, you know, it -- it seems like we're, you know, $0.75 difference in that range when you take out the pandemic spike, not $1.50.
Q. Okay. That leads me to my next set.
So later down on page 5 you talk about how National Milk is proposing a $0.55 adjustment for both Class III and IV.
My first question, just to make sure it's clear on the record, that's a per hundredweight adjustment that you kind of --
A. Yes.
Q. -- use the formulas and put those factors together --
A. Correct.
Q. -- okay, of what they proposed?
And then feeding into your graph on page 6, then, in your opinion, that $0.55 is kind of around the average difference, and so that would be --
A. Yes.

Q. -- that's appropriate, or the data indicates --
A. Correct.
Q. -- in your opinion --
A. Yes.
Q. -- is appropriate?
A. Yes.
Q. Okay. And so you also say in the data, prior to 2008, when we had the first adjustment, because that difference was also positive, it indicated the need to be an adjustment.

And when you saw the difference hover around zero from that green line to somewhere in 2015, that indicated to you that the manufacturing allowances seemed to be adequate during that period?
A. Yes.
Q. Okay. So later on you talk about, in relation to Proposals 8 and 9, you say, "The magnitude of change contained in these proposals is way too large."

And are you talking about as you compare them to the current levels?
A. And compared to National Milk's proposal.
Q. Okay. And so do you have an opinion on those proposals -- you know, this is kind of like a phase-in approach over four years. Do you have an opinion on any of those particular years or are you talking about the end result, which is year four?
A. Well, the end result is certainly unacceptable.

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

make an undesirable result any better.

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

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

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

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

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

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

Just wondering if you can just expand on that thought.

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

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

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

A. Absolutely.

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

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

THE COURT: That's what?

THE WITNESS: Putting lipstick on a pig.

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

THE COURT: Mr. Lamers?

MR. LAMERS: If I may, Your Honor.

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

THE COURT: And you would like to --

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

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

That's all I have. Thank you.

THE COURT: Thank you, Mr. Lamers.

Are there any other questions at all for this witness?

There are none. Thank you so much.

THE WITNESS: Good seeing you again, Judge Clifton.

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

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

THE COURT: Thank you. Yes, indeed.

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

There is none. Exhibit 385 is admitted into evidence.

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

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

(Whereupon, a break was taken.)

THE COURT: Let's go back on record.

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

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

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

THE COURT: Good. You may.

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

THE WITNESS: Good morning, Mr. English.

ROGER CRYAN,

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

CROSS-EXAMINATION

BY MR. ENGLISH:

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

THE COURT: A little more volume for the questioner.

BY MR. ENGLISH:

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

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

A. That is correct.

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

A. Yes.

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

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

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

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

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

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

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

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

A. Say that again.

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

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

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

A. The availability of milk.

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

A. I believe so.

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

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

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

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

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

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

A. Yes.

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

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

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

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

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

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

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

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

Q. Let me come back to my question.

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

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

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

A. The system is designed to provide that incentive.

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

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

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

A. I'm not very familiar with the transportation

credit provision in Order 30.

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

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

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

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

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

A. We do, and we would anyway.

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

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

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

A. Yes, and it does.

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

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

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

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

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

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

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

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

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

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

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

A. I would defer to the record.

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

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

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

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

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

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

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

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

BY MR. ENGLISH:

Q. You agree that Federal Orders set minimum prices,

correct?

A. Yes.

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

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

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

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

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

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

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

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

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

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

Do you agree that AMS should establish, in the

regulations for minimum prices, representations of an efficient market?

A. Of an efficient competitive market?

Q. Yes. Do you agree with that statement?

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

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

A. I have just been explaining it.

Q. What specific ways?

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

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

other groups.

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

Do you see that document?

A. I do.

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

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

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

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

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

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

zones rather than individual county numbers.
BY MR. ENGLISH:
Q. Now, you also say, I believe, that October would be a better month to use, in your view, than the average?
A. It would seem to be.
(Court Reporter clarification.)
THE WITNESS: Yes, it would seem to be.
BY MR. ENGLISH:
Q. Doesn't that overstate the value of milk from a minimum price perspective given the fact that there's times of the year where it would be the other way because of May in most locations?
A. I think it's reasonable to set the Class I differential in such a way that you adequately meet the fluid needs around the calendar, year round.
Q. Given 18% Class I utilization nationwide, do you have any evidence that we do not have a sufficient amount of milk for fluid use in this country already?
A. Do we have enough milk?
Q. For fluid use.
A. We have enough milk. The question is, is the system set up to deliver it to those plants in a way that is fair and equitable to producers.
Q. Doesn't that go back to my original question, that do Class I differentials actually move milk to plants?
A. And as I said, they do.
Q. In an order with 6% Class I utilization, like the Order 30, whether it's a $1.80 or $3 as proposed by

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

A. Maybe.

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

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

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

A. If you say so.

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

A. You tell me.

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

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

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

BY MR. ENGLISH:

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

A. $0.18 a gallon.

Q. $0.18 a hundredweight.

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

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

A. Say that again.

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

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

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

A. Everyone who pools.

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

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

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

Just because you can raise prices on Class I, does

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

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

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

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

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

A. Yes.

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

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

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

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

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

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

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

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

THE COURT: Where are you, Mr. English?

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

"The purpose of the Class I differential" --

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

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

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

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

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

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

THE COURT: Thank you.

BY MR. ENGLISH:

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

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

Q. Yes. You are correct.

A. Thank you.

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

BY MR. ENGLISH:

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

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

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

A. Ms. Keefe.

Q. -- Ms. Keefe?

A. That's correct.

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

A. No.

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

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

A. No.

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

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

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

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

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

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

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

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

A. By building manufacturing plants.

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

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

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

A. Fluid plants.

Q. Fluid plants.

A. Right.
Q. Correct. If they are running at slack capacity, doesn't that mean they don't need more milk?
A. They need -- not necessarily, no. Not necessarily.
Q. Have you heard testimony this week about plants closing, especially from Mr. Hoeger, in the Order 32 area?
A. I don't recall it, but I -- I defer to the record.
Q. You know that plants, Class I plants, are routinely closing in this country, correct?
A. We have a lot of Class I plants.
Q. But we have closed a fair number, haven't we?
A. I believe so.
Q. Isn't that the result of consumers buying less fluid milk, and fluid milk plants are not able to run as much milk as they used to for those plants?
A. The -- I think it's the result of a stable market. There are still -- when a new plant is constructed, it's -- it's -- mathematically speaking, it's taking volume that was being handled by other plants, and so plants close.
Q. And to the extent plants are running less fluid milk, isn't it the case that a number of fluid milk plants, whether proprietarily owned or cooperative owned, are running through their plants products that are not milk based, but nonetheless claim to be dairy products?
A. Could you specify?
Q. Oat milk, almond milk, products like that?

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

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

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

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

A. What is?

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

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

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

Order Reform, correct?

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

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

A. I believe so.

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

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

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

A. I believe the Class I processors --

Q. Yes.

A. -- are doing their best --

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

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

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

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

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

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

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

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

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

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

A. They should apply a set of consistent principles.

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

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

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

A. Foolish consistency.

Q. Foolish consistency?

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

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

A. Okay.

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

A. That's the source from AMS.

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

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

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

THE COURT: Was the what?

MR. ENGLISH: Basic formula price.

BY MR. ENGLISH:

Q. Correct?

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

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

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

A. Yes.

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

correct? In simplest terms?

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

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

The basic formula place replaced the Minnesota-Wisconsin price, correct?

A. Right.

Q. The Minnesota-Wisconsin price was a straight-up Grade B survey, correct?

A. That's right.

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

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

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

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

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

A. That's correct.

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

A. No.
Q. So how haven't you made an apples-to-oranges comparison when you now use, on Table 1 on page 13, the Class III price, which does not have in it a survey of Grade B milk?
A. No. I don't think so. It's the Class III price.
Q. But you agree the Class III price today is not based in any way on a survey of Grade B milk, is it?
A. The Class III -- the BFP was the Class III price in 1998, and the Class III price is the Class III price today.
Q. Wasn't the point that USDA was comparing the price of Grade B and Grade A back in 1998?
A. I think if they intended to do that, they would have simply used the MW price.
Q. Well, they didn't have an MW price, they had a BFP, correct?
A. They did have an MW price. That was the price, still collected at that time, upon which the BFP was based. I think there was a specific intent to compare the fluid grade milk price in those two states to the Class III price, which was the principal regulated manufacturing price at the time.
This whole thing is based -- the whole calculation was intended to show the assessment of the competitive -- the competitive -- the additional money required in the competitive market to attract milk, fluid grade milk, into the market over and above the basic manufacturing price in

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

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

A. Yes.

Q. Thank you.

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

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

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

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

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

with Grade A milk, correct?

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

Q. Yes.

A. I would agree with that.

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

A. Probably.

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

A. That's correct.

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

A. Which proposals?

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

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

Q. Isn't --

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

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

Q. Isn't --

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

Q. I'm sorry.

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

A. The purpose of what?

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

A. Yes.

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

A. That's correct.

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

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

THE COURT: Thank you.

BY MR. ENGLISH:

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

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

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

keep it intact.

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

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

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

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

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

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

THE COURT: For suppliers?

MR. ENGLISH: Suppliers for balancing.

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

BY MR. ENGLISH:

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

A. Well, there have been changes, and that's what this is based on.

Q. Aren't some of those changes that there are now operations in Class I that actually take milk on a basis where they are self-balancing?

A. I -- I haven't heard that testimony, but if -- what I understand is on a regular basis, if a Class I handler takes steps to better balance their own supplies, they often do it on the basis of an arrangement with the cooperative where they -- where they -- where they pay less for the milk.

Q. Which is to say it happens outside the Federal Order system?

A. Right.

Q. You have got -- you have discussion on page 7 of hauling rates.

Aren't hauling rates already factored into the Class I differential location values in the model?

A. They are factored into the location differentials in the model, which is that efficient movement of milk. But it doesn't -- but it reflects -- the increase in hauling rates reflects some of the increase in costs of balancing by moving milk from distant locations to fluid plants when needed. It's a specific element.

Q. Doesn't it work the other way around that when they are balancing, they are more likely not moving the milk to the Class I plant, instead, moving it to the closer manufacturing plant?

A. Well, depends on how you are talking about balancing. I mean, ultimately, the objective is to get

milk to fluid plants when needed, and that when the -- when supplies are short, that involves moving milk to -- from further out into the fluid plant.

Arguably, the balancing also involves moving milk to -- that's close into the flush season, is moving milk that's close into the fluid plant to further out manufacturing plants. But that all takes hauling. That raises the costs. And hauling costs were part of the consideration in 1998.

Q. So let's turn to the conversation on incentive on page 7, and it will tie into your discussion about Dr. Stephenson's presubmitted but not yet provided testimony.

It appears from your testimony that your analysis regarding the need to incentivize the Class I market and the value which should be perceived in the base Class I differential is based on the values calculated during Federal Order Reform from 1995 and 1996, correct?

A. Right.

Q. Have you done any economic analysis or calculations to determine what that value is today?

A. That's what Table 1 is.

Q. I thought Table 1 was your analysis of the difference between Grade A and the Class III price.

A. That is, to the best of my understanding, what the Table 7 and 1998 represented.

Q. So are you double counting? You are applying it both to the Grade A piece and now to the incentive piece?

I'm talking about the incentive piece now, not the Grade A piece.

A. Right. Incentive piece is what -- what it takes to deliver Grade A milk to the market compared to the manufacturing price. The set of milk that's eligible for delivery to bottling plants, what does it take to get that milk, having once incentivized the producer to maintain the Grade A status, what additional incentive does it require to move that Grade A milk into the -- into the fluid market?

Q. So going back to Table 1 now on page 8, what is the source for your information under the column "Minnesota" for "Grade A Pay Price" at 3.5%?

A. That's the -- that's the price for fluid grade milk in Minnesota according to the NASS.

Q. And, again, 99% of which is now all Grade A, correct?

A. I haven't looked at the -- I don't recall what the percentage is in Minnesota at the moment, but it's in that ballpark.

Q. You are aware that Dr. Stephenson's analysis performed for MIG was to value that incentive piece, correct?

A. Value what incentive?

Q. That incentive piece. The purpose of his testimony was to value that incentive piece, correct?

A. I read his testimony. I don't recall that conclusion. I don't recall that element, but I would --

if you say so.

Q. So if I asked you to discuss your views versus his views, you don't have that information partly because he hasn't testified yet, correct?

A. His testimony has been presubmitted. He somewhat offhandedly dismisses all three elements of this. I addressed the arguments that I thought needed be to addressed.

Q. So coming back to incentive piece, hasn't he found that further incremental payments are not necessary to incentivize milk to meet fluid processing needs?

A. I don't know -- I don't recall that that's based on any particular study. My -- my recollection is that that's based on his -- his opinion based on his experience.

Q. You didn't read his testimony as being a use of the very same model that was used by National Milk with a different output?

A. If you are talking about his -- his application of the average shadow price for -- for Class I milk versus manufacturing milk, as I said in my testimony, I don't think that's appropriate, because it's a misinterpretation of his own results.

I don't think that is relevant. It takes -- it doesn't consider all the factors that have gone into his establishing the minimum Class I price. The engineering approach of the USDSS model does not take any of that into consideration. That's the reason why it has some

limitations. It has to be adjusted, has to be considered, and it doesn't really speak to what the minimum Class I differential does.

The Class I -- minimum Class I differential can be looked at two ways. It can be looked at in terms of those three elements. It can be looked at much more broadly in terms of what is the minimum Class I differential required to contribute to consistent hierarchy of class prices, substantial volume of revenue available for the pool, and -- and a general incentive over time to maintain the Federal Order system to the benefit of producers and processors.

Q. We'll hear from Dr. Stephenson about his interpretation of his model.

It's not your model, is it?

A. It's not my model, but I understand it.

Q. Do you understand it better than Dr. Stephenson?

A. I think I have thought of some things that he hasn't thought of. It's a very complicated model. There's a lot involved, and he did very good work in putting it together. But it is what it is, and it is not what it isn't.

Q. Do you have any evidence that fluid milk plants are seeking out, but not receiving, sufficient raw milk supplies?

(Court Reporter clarification.)

MR. ENGLISH: Raw milk supplies.

THE WITNESS: The system -- the system generally

works. At times there has to be a premium. But like Mr. Sims testified that, you know, over-order premiums can be ephemeral, and regulated prices can be more durable, and that relationship helps maintain stability and order in the market.

BY MR. ENGLISH:

Q. You say you're curious as to how capacity affects the results in Dr. Stephenson's analysis, correct?

A. I do not understand whether he is establishing a shadow price at a full manufacturing node that reflects the value of an additional hundredweight of milk being available, which would be presumably limited if that node is full, or whether he is essentially representing the shadow value of an additional hundred pounds of processing capacity at that location.

Q. With respect to capacity, were you here when Dr. Nicholson testified?

A. I was.

Q. And did you ask him about how the model measures capacity?

A. I had not seen -- I had not read Dr. Stephenson's testimony, his statement, so I did not have a reason to ask that, no.

Q. You had opportunity to because it was presubmitted at the same time as NMPF 19, correct?

A. Probably. I probably did have an opportunity to.

Q. Are you aware that the USDSS's model measures monthly capacity?

A. Monthly capacity.
Q. Monthly capacity.
A. It's based on monthly data.
Q. It's based on monthly data.
Are you aware of that?
A. On a specific month's data, which means it does not take into consideration variation from month to month aside from running different months and making some other comparison.
Q. You don't think it runs on monthly capacity over a period of time so it does reflect seasonal production and consumption changes?
A. I'm not sure what you are asking me.
Q. Well, 45 seconds ago you said it's run on one month so it can't take into consideration different seasonal production.
And I'm saying, are you aware that it does run multiple months over a period of time, so it can reflect seasonal production and consumption changes?
A. It reflects them -- it reflects the difference from a month to another.
Q. Thank you again for your time, Dr. Cryan.
MR. ENGLISH: I have no further questions.
THE WITNESS: Thank you, Mr. English.
THE COURT: Who next has questions for Dr. Cryan? I see --
THE WITNESS: I did ask Dr. Nicholson by e-mail, and I don't know whether this is -- he said --

MR. ENGLISH: I object.
THE WITNESS: That's fine. That's fine.
THE COURT: You don't want that information?
MR. ENGLISH: No. It's clearly hearsay.
THE WITNESS: I understand. I agree. That's fine.
MR. ENGLISH: Well, that's fine --
THE WITNESS: That's fine. That's fine.
THE COURT: It was responsive to your saying --
MR. ENGLISH: Yes.
THE COURT: -- you didn't talk to Dr. Nicholson about his --
MR. ENGLISH: Okay. If you want to let him --
THE COURT: -- you had read his testimony --
MR. ENGLISH: -- I just, you know --
THE COURT: -- you had it available, and you didn't --
MR. ENGLISH: Well, I understand. But Nicholson -- Dr. Nicholson has testified. I mean, if we're going to be able to e-mail people outside the room --
THE COURT: No.
THE WITNESS: I'm not -- I'm not arguing.
THE COURT: He's not saying he just e-mailed him.
MR. ENGLISH: Yes, he is.
Aren't you saying you just did?
THE WITNESS: I just received -- I received the e-mail earlier today.

THE COURT: Oh. I understand now, Mr. English, why you are objecting. Okay.

THE WITNESS: And I understand the objection, and I will not assist. On my behalf, I will not assist.

THE COURT: Does anyone else have questions before I turn to the Agricultural Marketing Service for their questions?

I see none. The Agricultural Marketing Service is invited to ask questions of Dr. Cryan.

CROSS-EXAMINATION

BY MS. TAYLOR:

Q. Good morning.

A. Good morning.

Q. Thanks for coming back to testify.

A. Thank you for having me.

Q. I'm going to start with your Exhibit 382, and that's where we're talking about Farm Bureau's Proposal 21. And so I want to try to synthesize everything to make sure we understand.

So your proposal is to base the Class II differential solely on the cost of drying skim, not considering the cost of drying condensed.

A. Right.

Q. Okay. And you want to incorporate the nonfat dry milk Make Allowance, whatever that is, whatever that turns out to be --

A. Right.

Q. -- along the same with the yield factor, whatever

it is or turns out to be --

A. That's the proposal.

Q. Okay. And then whatever the accepted pounds of solids and skim are?

A. Correct.

Q. Solids in skim, okay. Excuse me.

A. Accepted solids test in skim milk, right.

Q. Yep. Okay.

On page 2 of that statement, 382, in the middle of the paragraph the sentence reads, "However, we believe that the simple update using the presumed cost of nonfat dry milk processing achieves the original purpose of the Class II differential."

And I was wondering what -- if you could explain what you think the original purpose of the Class II differential is.

A. I believe that the original purpose of the Class II differential was to come as close to the Class I differential as was practical without incentivizing an economic drying of milk just for that price difference. The -- as I -- as I testified I believe in the statement, and certainly in cross-examination, Class II was, at one time, part of Class I, and it was -- it was the evolution of so many Class II products into sort of nationally-branded and manufactured and shipped products that argued for a national price for Class II rather than a location-specific price for Class II.

So the original purpose is to recognize that

Class II processing in many cases requires the same sort of balancing services as Class I.

Q. And so that leads to the next paragraph there, where I think I understand you are saying, which would justify, in your opinion, the Class II differential being the lower of whatever this calculated value is or the -- or the base Class I differential?

A. Yeah, I -- I have to say that's -- that would be reasonable to -- to cap this at the -- at the base Class I differential, because that is consistent with our -- our objectives of maintaining the hierarchy of class prices and recognizing the balancing needs of Class II without having the price exceed Class I.

Q. Okay. I know you -- I think this was discussed a little bit yesterday -- oh, that's right. One other thing before I turn to that question.

If we look at page 2, in the middle paragraph, the sentence, start of the paragraph is "the original $0.70." And I'm looking at the third line down, and I'll read the clause: "The differential should not be higher than the cost to convert that relatively standard Class II ingredient form into a Class IV form."

And I am wondering if II and IV in that sentence should be reversed. And if not, then I just need you to clarify for me what you mean.

A. Give me a moment to go over it.

No, I think that is right. The idea is that skim condensed milk is this relatively standardized Class II

ingredient that's -- it -- you know, it's a -- milk is -- skim milk is condensed and shipped to the -- for transportation savings, and is often used in Class II products, and that the original foundation here was to look at the conversion cost of skim condensed into Class IV.

This paragraph is sort of aimed at taking stab at the -- at what that would look like as opposed to just using the full drying cost of skim milk.

I -- I asked a few people who said that, well, I have talked to other people who said they had a hard time finding any sort of condensing costs, which if there was some record for condensing costs, that could provide you an alternative based on the original argument. But I also think that -- that there's also an argument for just using the drying cost for skim milk as well.

Q. Okay. And then I'll turn to Exhibit 382, where you do have a little bit on your Proposal 21 in the beginning on the second page.

A. Which exhibit?

Q. Of, excuse me, 383.

A. Okay.

Q. And I do think -- well, my first question, in the middle of the sentence of the paragraph -- in the paragraph, it has a bolded line. You have a sentence that reads, "For several reasons, including most specifically the fact that much Class II use is at distributing plants."

And I was wondering if you could -- if you had any data or information to put on how much Class II use actually occurs at distributing plants as opposed to standalone Class II plants?

A. I do not. It certainly goes to some of the questions that Mr. English was asking. And I suppose it's a little too late for a data request, although if we're going to continue in January --

Q. It's too late for data requests.

A. All right. Only USDA knows.

Q. Okay. And so I do think you touched on it with Mr. English a little bit today, but I have a similar question I wanted to ask about your thoughts on the -- you know, the Federal Order system tries to ensure that, whatever the number is, plants producing the same product have similar raw milk costs, whatever that cost is.

And if you have Class II use at distributing plants where they have to pool, and according to you there's a lot of that use, I don't have the number, as opposed to Class II plants that do not have to pool so they cannot opt to do that, are we creating, like, you talk about, the potential disparity between the raw milk cost between those two plants?

A. Okay. Yes, I can talk about it.

Certainly Class II plants can depool now, and when they do, it is more commonly based on which way the Class IV price is moving, and now that relates to the uniform price rather than the $0.70 in the Class II price.

Raising that $0.70 would cause -- there would be times when that makes the difference for depooling Class II plants. But much more frequently that would be the difference between IV and the blend price.

I'd also say that there are benefits to plants to pool, and that the, you know, Class II use at the distributing plants typically offsets some of the Class I value and reduces the pool contribution required by the Class I plants. And by the same token, there's oftentimes when -- when a plant, a Class II plant that depools because it's -- because the Class II price is high, I don't know what the disadvantage is to that. There's some disparity, and it's based on pooling requirements and that combination. I would -- I don't argue against that. I don't argue that that's not the case.

Q. But it sounds like, in your opinion, the pooling decision is more based on the Class IV price, not on the differential, and not on the increased differential that you proposed?

A. I think more -- it is more commonly based on the difference between Class IV and the uniform price that is on the Class II differential itself.

Let me give you an example that Mr. English pointed out, show -- was -- where months where it was really the Class IV price moving things more than the -- more than the differential.

Q. Okay. Turning to Proposal 19 which you support, the National Milk proposal Class I differentials --

A. We do support it in principle. We support the approach that National Milk's taken. We recognize there's need for adjustments. But ultimately, we believe that the Department should, and will, examine it in detail and make a fair assessment of what's -- what's an equitable and appropriate set of adjustments to the model.

Q. And you have a statement right at the top of that section that says, "In effect, the ebbs and flows of local and regional market conditions could wash away any sound long-term price relationship which may be hard to re-establish."

And I was wondering if you could expand on what you mean by that statement?

A. I think that reflects what Mr. Sims testified to about those -- about one of the reasons we have the Federal Order system, is to sort of stabilize these relationships that can come and go, you know, when the supplies are needed, the arrangements can be made, and they can be tossed out the window when they are not.

The Federal Order system provides some certainty and stability in the pricing relationships. It's market-oriented. It's aimed at relationships that -- that reflect the actual cost and opportunity costs associated with the whole system.

And as I testified, the system provides a fair world for dairy farmers which encourages them to better serve the entire industry and the public over the long-term.

I think that's -- I think that's important that we recognize the value of the system overall, that we have through nine weeks of this kind of at times choked on the bones. You know, we have -- we have gotten bogged down in the details. And I think it's important on occasion to recognize the big picture here, which is that the Federal Order system provides -- has been a very successful foundation, a very successful structure in which the dairy industry here has thrived. I think Mr. Vanden Heuvel said something along these lines, and I think my testimony reflects that as well. I don't think we can overemphasize that.

Q. And I gather from your testimony on this proposal, you know, you look at the model that was used as a base, as -- well, it's been testified to, kind of the most efficient way to move milk. But that's not reality, and you go back into -- mostly on page 4 of your testimony, to talk about some of the other things that come into account of reality, which is justification why adjustment -- well, one, you say the model then proudly spits out conservative estimates on costs, and then you have some reasons as to why, and it makes sense to make adjustments off the model to account for some competition, you know, plant ownership, supply arrangements, et cetera, of which the model probably doesn't take into account.

Would that be correct?

A. Yeah, two parts to my answer. One is that the model -- the model is the most efficient result, if you --

if you -- if you were named commissar of milk movement and had to make a decision about where everyone in the country should get their milk from and which plant it should go through, that model generates the most efficient result. It does not correspond to a competitive milk market where there's multiple companies in multiple markets competing and finding different ways to appeal to different customers.

So -- so the commissar approach would, in theory, if we didn't value the -- you know, the importance of competitiveness and achieving efficiencies, it would -- it would lead to slightly -- slightly lower spreads across the country, I believe. I believe the model is -- has been established -- it establishes the spreads overall.

And I don't think -- I don't really think National Milk's proposal, you know, changes that. I think they have used these anchor cities as using the big picture elements of the model as a foundation, and they are making local adjustments. I do think a lot of these local adjustments are appropriate.

Another adjustment that -- that makes sense is for some of the increases in the Pacific Northwest based on the export volume. I don't know that the model necessarily reflects where exports are moving out of and what those -- what those values are.

I think the National Milk folks had some understanding of what all those things -- I think they made a lot of decisions that -- you know, one of the

reasons this hearing is going so long is because National Milk needs to come bring folks out and explain region by region why there's a justification for doing what they are doing. And I do think, you know, you are going to have to examine each of those things and decide whether it makes sense or whether it doesn't.

And I would anticipate, I would certainly hope, that any of the proprietary handlers who feel that there's other adjustments that should be made will present those and you will take those fully into consideration so that in the end we have a system that uses the bones of the model, which will still be, I think, somewhat compressed in terms of the regional variation, you know, compared to what the actual system generates, and -- and make local adjustments along those lines.

Does that answer your question?

Q. It does.

A. Thank you.

Q. Yep. I appreciate it.

A. Certainly. And I appreciate your attention. I appreciate the quality of the questions from USDA through the whole hearing. It demonstrates attention from them and comprehension in ways that are reassuring.

Q. Okay. Let's see. I want to move into Proposal 20, your opposition to reducing the base differential to $1.60. And I'm just trying to -- I know it's in your testimony, but I want to make sure we're clear about it.

And I take it, is this a proposal modification you are offering or just information as to justify why it shouldn't go to zero, or are you saying, I think it should actually be increased?

A. I would say that it is an alternative proposal within the scope of the hearing, that rather than reducing it from $1.60 to zero, we should consider increasing it from $1.60 to $2.20, which lines up well with the minimum differential proposed -- the de facto minimal differential proposed by NMPF.

Q. Okay. So as you took on the three different pieces of the differential, you put information to justify increasing the Grade A incentive from $0.40 to $0.67?

A. Right.

Q. Okay. And that's based on some ERS cost of production estimates which you linked in your statement to say that that's a good proxy for saying what it costs now to stay Grade A certified; is that correct?

A. That's a good proxy for the non- -- the sort of non-feed production costs that are -- that are most similar to the sort of things that are required to maintain Grade A standards.

Q. Okay. And then for the balancing piece, you put on information to increase from the current $0.60 to $1.04. And I think part of what -- part of that increase is based off a percentage increase related to the increase in III and IV Make Allowances.

Am I reading that part correctly?

A. Yes.
Q. And then part of that is to account for additional transportation costs to balance fluid plants?
A. Right.
Q. Because as I understood that Mr. English asked you some questions about that, is we do acknowledge that the model accounted for some transportation costs, as we just discussed, the most efficient routes.

But you would argue there's additional transportation on the balancing side of getting milk to fluid plants when needed that's not accounted for, and that is what these transportation costs would represent?
A. Right. I think it's apples and oranges. The difference that the transportation costs go in to calculating the difference among location, that there's an underlying cost associated with delivering, moving, you know, shifting from one group to another, shifting from one location to another, and delivering distance supplies for balancing.
Q. So, for example, as has been testified to at the hearing, there's a lot of talk about how there's stair-stepping of milk.

But in your example maybe -- so maybe the model accounted for the stair-stepping, but in your example, maybe that didn't occur in reality, and there was actually additional transportation costs incurred?
A. Yeah. Balancing is different than the -- daily and seasonal balancing is different from just a static

solution as generated by the dairy -- by the USDSS.

And I would say, as I tried to make clear in the testimony, that as much as possible, I tried to follow the logic of the original decision in 1998 that identified $1.60 as the minimum differential. I -- I tried as much as possible to lay that out. In fact, I would not have done this if there had not been a proposal to reduce it from $1.60 to zero, having opened the door to what that level should be, and recognizing that there have been increases in costs across the board, and that there's a value to establishing a sufficient minimum Class I price differential overall to the whole workings of the system.

We -- I did do that, and I did -- again, I did try to follow the logic of the 1998 decision as much as possible, because so much of what's going on in this hearing is about simply taking the existing logic of the Federal Order system and the order reform decision and updating the numbers according to the same logic.

Q. And on the last piece, the incentive to serve Class I customers, your sort of a proposal is to go to $0.60 to $1.20. And you use Table 1 on the next page, page 8, to compare the Class III prices, which are from AMS, to the Grade A pay price in Minnesota and Wisconsin, and you said those were NASS prices.

Did I catch that correctly?

A. Okay. Let me clarify that. So that -- that highlighted sentence that -- that on page 8 that says, "Altogether, increases in the foundation for these three

elements justify not a reduction of the Class I differential, but an increase of approximately $0.60."

I recognize that there is a negligible difference between the -- and the incentive to serve Class I customers following the same Table 7 logic from 1998 and -- and duplicating as much -- as closely as I could to the same comparison for --

Q. Okay.

A. -- the '21 -- 2021 and 2022. So I am not proposing -- we're not -- we're not suggesting that $1.20 increase. We're suggesting a $0.60 increase total, so -- and that includes no change in the last element --

Q. Okay.

A. -- the Class I -- incentive to serve Class I customers only.

Q. Okay. I appreciate that clarification. Okay.

And -- and I think as I read, with that in mind, that paragraph, then what you are talking about is, according to you, USDA used premiums back in Minnesota and Wisconsin to look for what it needed to incent milk to Class I?

A. Right.

Q. And current premiums are less, but still above $0.60, so the $0.60 is still appropriate?

A. Yeah, premiums in the sense that the -- that the all-milk price in that state is above the Class III price.

Q. Right.

A. Yeah. That the all-milk price for fluid grade

milk is above the -- is above the Class III price. I believe from my -- from reading into the -- everything I could read into that discussion of Table 7 in the 1998 decision, I believe that that is -- that's what was done, that there was a comparison of the fluid grade milk price for Minnesota-Wisconsin to the -- to the Class III price.

Q. Bear with me one second.

A. Sure.

Q. I think that's it from AMS.

MS. TAYLOR: Thank you so much.

THE WITNESS: Thank you.

THE COURT: Dr. Cryan, is there any part of what you want to emphasize that needs follow-up at this point?

THE WITNESS: I don't believe so, Your Honor. I think I would just ask that these exhibits be whatever officially whatever.

THE COURT: Is there any objection of the admission into evidence of Exhibit 382?

There is none. Exhibit 382 is admitted into evidence.

(Thereafter, Exhibit Number 382 was received into evidence.)

THE COURT: Is there any objection to the admission into evidence of Exhibit 383?

There is none. Exhibit 383 is admitted into evidence.

(Thereafter, Exhibit Number 383 was received into evidence.)

THE COURT: Is there any objection to the admission into evidence of Exhibit 384?

There is none. Exhibit 384 is admitted into evidence.

(Thereafter, Exhibit Number 384 was received into evidence.)

THE COURT: Dr. Cryan, thank you.

THE WITNESS: Thank you.

THE COURT: What would happen if we broke for lunch now, came back at 1:15, and who would then be invited to testify? Dr. Capps?

All right, then. Thank you. Let's come back at 1:15.

We go off record at 12:14.

(Whereupon, the lunch break was taken.)

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THURSDAY, NOVEMBER 30, 2023 - - AFTERNOON SESSION

THE COURT: Let's go back on record.

We're back on record at 1:16.

Mr. Rosenbaum.

MR. ROSENBAUM: Yes, Your Honor. Before we have our witness take the stand, I would like to go ahead and mark the exhibits that we're going to be using during his testimony.

THE COURT: Excellent.

MR. ROSENBAUM: And so let me start by handing Your Honor a copy of IDFA Exhibit 52.

THE COURT: Yes. Now, the AMS already gave me six different exhibits. I don't have the exhibit numbers on them, but they have got the stickers.

MR. ROSENBAUM: All right. Your Honor, the first document is, as I said, IDFA Exhibit 52, which we would like to have marked with the next Hearing Exhibit number, please.

THE COURT: I believe that's 386 is IDFA Exhibit 52. 386.

(Thereafter, Exhibit Number 386 was marked for identification.)

MR. ROSENBAUM: All right. And then the next document we would like to have marked is the one you have I, think, in front of Your Honor. I think it says IDFA Exhibit 53. It's a little difficult to read, but let me hand out that one.

THE COURT: Very good. I'm marking that as 387.

387 is IDFA Exhibit 53. Looks like this (indicating).

(Thereafter, Exhibit Number 387 was marked for identification.)

THE COURT: All right. And then the next one.

MR. ROSENBAUM: Actually, Your Honor, the next one is one that I'm only giving to USDA now, so you wouldn't have a copy yet.

THE COURT: Okay.

MR. ROSENBAUM: It's the one that's called Abridged Curriculum Vitae.

THE COURT: All right.

MR. ROSENBAUM: And I'll hand Your Honor a copy.

THE COURT: Thank you very much. So I'm marking that as 388. Exhibit 388 is Abridged Curriculum Vitae as of March 19, 2022, of Oral Capps, Jr.

(Thereafter, Exhibit Number 388 was marked for identification.)

MR. ROSENBAUM: And then the next one, Your Honor, is the document that's an Analysis of U.S. Dairy and Nondairy Milk Demand.

THE COURT: All right. I have that.

MR. ROSENBAUM: And, actually, I think the Curriculum Vitae I should probably go ahead and mark as IDFA Exhibit 54, along with it being Hearing Exhibit 388.

THE COURT: IDFA Exhibit 54 is Exhibit 388, the Curriculum Vitae.

MR. ROSENBAUM: And then -- and then Analysis of U.S. Dairy and Nondairy Milk Demand, I would ask that that

be marked as IDFA-55, as well as the next Hearing Exhibit the number.

THE COURT: All right. That next number is 389. Exhibit 389 is also IDFA-55.

(Thereafter, Exhibit Number 389 was marked for identification.)

MR. ROSENBAUM: And then the last document that I'm having marked would be the document, the article, "I Say Milk, You Say Mylk."

THE COURT: Yes. I can't wait until we get to that one. That sounds great.

MR. ROSENBAUM: Which apparently there's a long-running joke among economists with similar titles to these kinds of studies.

And in any event, this is IDFA Exhibit 56, and that would be, I think, Hearing Exhibit 390.

THE COURT: That's correct. IDFA-56 is Exhibit 390, "I Say Milk, You Say Mylk," spelled M-Y-L-K. All right.

(Thereafter, Exhibit Number 390 was marked for identification.)

THE COURT: And I still have three more exhibits, but you are not dealing with those at this time, Mr. Rosenbaum?

MR. ROSENBAUM: Those are not my exhibits, Your Honor.

THE COURT: All right. Very good.

MR. ROSENBAUM: And at this point then, I would

like to call Dr. Oral Capps to the witness stand, and I would ask that the -- well, start with that.

THE COURT: All right. Dr. Capps, if you will make yourself comfortable.

Now, is that leftover water from Dr. Cryan?

THE WITNESS: I just brought it. It's fresh.

THE COURT: Oh, good. Very good. I'm glad.

Now, you may wonder what the purpose of the ruler and the yardstick are. It may become evident as we go forward.

Would you state and spell your name?

THE WITNESS: Oral Capps, Jr., O-R-A-L, C-A-P-P-S, suffix J-R.

THE COURT: Have you previously testified in this proceeding?

THE WITNESS: I have not.

THE COURT: I'd like to swear you in.

ORAL CAPPS, JR.,

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

THE COURT: Thank you.

Now, if you need to adjust the position of the mic, you can move the base of it.

THE WITNESS: That will be fine. Can everyone hear me?

THE COURT: Actually, yes.

THE WITNESS: Good.

THE COURT: Surprises me. You are quite a ways

from the microphone. Very good.

And it will depend on whether you like your papers to the left of the laptop, to the right of the laptop, you might have to make adjustments as we go.

DIRECT EXAMINATION

BY MR. ROSENBAUM:

Q. Good afternoon, Dr. Capps.

Can you please introduce yourself by telling us where you work and what you do there.

A. I -- I'm an executive professor and regents professor in the Department of Agricultural Economics at Texas A&M University. Been there since 1986, so I have had a long tenure at Texas A&M.

Q. And start with telling us what your educational background is, please.

A. My educational background was all about the 1970s. From 1971 to 1979, I got four degrees from Virginia Tech. It was once called Virginia Polytechnic Institute & State University. I have a degree in mathematics, a degree in statistics, a master's degree in ag economics, a Ph.D. degree in ag economics.

Q. And tell us what kind of things you have worked on and taught in your career.

A. Over my 40-plus career I'm an ag economist, but principally my area is demand and price analysis. I'm a marketing economist. I also am a quantitative analyst, marketing analyst. I do a lot with applied econometrics.

Q. And do you -- in addition to teaching, do you do

consulting as well?

A. I run a center at Texas A&M, I guess I failed to mention that. But the center I run since 2009, I'm a co-director. It's called the Agribusiness Food and Consumer Economics Research Center, or we like to use the acronym AFCERC.

So it's an interesting center in the sense that we operate like a consulting firm, but within academia. So we have government contracts, or private sector contracts through the center at times, because of FOIA requests or just the fact that the project couldn't be done in a -- it's too short to be done by the time you get through all the paperwork going through the university, at that time I do act as a consultant.

And I have an outside business consulting company called Forecasting and Business Analytics, LLC, that was formed in 2001.

THE COURT: Would you tell me the letters that you referred to for the Texas A&M Research Center?

THE WITNESS: Yes. AFCERC, Agribusiness Food and Consumer Economics Research Center.

BY MR. ROSENBAUM:

Q. And are you a certified business economist?

A. I'm a certified business economist by the National Business Economics Association.

Q. And by your training and practical experience, do you consider yourself to be an expert in agricultural economics and statistics?

A. Yes.
Q. And I think you also mentioned marketing economics; is that right?
A. Yes.
Q. And demand and price analysis, correct?
A. Yes.
Q. And we're going to be talking today about elasticities, correct? You are going to be talking today about also elasticities, correct?
A. Yes.
Q. I'll be listening.
And is that a technique that's used in the context of demand and price analysis?
A. Absolutely. It's one of the cornerstones of microeconomics as well.
Q. Okay. And how about applied econometrics, do you do that as well?
A. In order to measure the own-price elasticities, one needs to develop econometric models, and that's where the applied econometrics comes into play.
MR. ROSENBAUM: Your Honor, at this point I would ask that Dr. Capps be recognized as an expert in agricultural economics and statistics, in marketing economics, in applied econometrics, and in demand and price analysis.
THE COURT: Is there any objection?
There is none. Dr. Capps, listen carefully because you may have to help me. I find you to be an

expert in a number of fields, including: Economics -- agricultural economics and statistics, marketing economics, applied economics, and demand and price analysis.

THE WITNESS: I would amend one word, Your Honor. Applied econometrics.

THE COURT: Econometrics.

THE WITNESS: Yes, ma'am.

THE COURT: Econometrics. Thank you.

BY MR. ROSENBAUM:

Q. So, Dr. Capps, have you done price elasticity studies over the years?

A. Many of them.

Q. Okay. And have you done them both as an academician and also as a consultant to the private business?

A. Yes.

Q. Give me an example of what a private business might ask you to take a look at, for example.

A. Well, you know, we -- let's talk about the private sector. Done a lot of work involving -- for Kellogg's, and they were interested in looking at demands for their various products. And they were asking us to do a case study if there would be cannibalism between phytosterols in orange juice in a product called Heart Wise versus the regular Minute Maid orange juice, because they were contemplating -- and I'm not sure where they -- what they actually did, but they were contemplating the use of

phytosterols in some of their products.

Well, that work allowed us to take a look at measurement of elasticities and cross-price elasticities that I will define in my presentation for Tropicana, Minute Maid, the two Minute Maid products, Florida's Natural, and other orange juices.

Q. Okay.

A. That's one example.

Interestingly enough, another example is not related to agricultural economics, but Mary Kay Cosmetics sold many -- still does -- items. They wanted to develop optimal pricing strategies which required the use of own-price elasticities and cross-price elasticities for a large number of their products. I was able to do that. Not able to publish it, highly proprietary, but that's another example.

And more recently looking at brands of yogurt, Chobani, Yoplait, Dannon, and other types of yogurt.

Q. Dr. Capps, is Hearing Exhibit 386 your written testimony in this hearing?

A. It is.

Q. And is -- is Hearing Exhibit 387 the PowerPoint presentation that you will use today to take us through the major highpoints of that written testimony?

A. Yes.

Q. Okay. If we could please put the PowerPoint up, and please proceed, Dr. Capps.

A. Thank you very much. I'll -- even though there's

many words on the slide, I just use that as a talking point, so we'll see how this goes.

First of all, and I don't mean to insult anybody's intelligence, but since we're talking about the notion of own-price elasticity, probably be best that we define it.

And I think you have had other testimony where people have done it, but for the sake of repetition, own-price elasticity: The percentage change in quantity of a product divided by the percentage change in the price of milk.

When you get this measure, what that means is for every 1% change in price, what is going to be the corresponding percentage change in the quantity of that product, here referred to as milk. The reason economists like this, it's a unitless measure, and it's, you know, related to percentage changes, which in business applications makes it a lot easier to understand.

And as far as signs go, it should be negative, the own-price elasticity.

I mentioned the fact that it's unitless, but there's three broad measures that economists, once they have the own-price elasticity, could determine the character of the demand for the product.

If an absolute value, the own-price elasticity exceeds one, we call that an elastic demand. But to translate that, that means the product is sensitive to changes in price.

On the other hand, if the own-price elasticity and

absolute value is less than one, we call that demand for a product inelastic. Still sensitive, but not sensitive in general to changes in price.

And if by chance the own-price elasticity were equal to one, we would characterize that product as the demand for it as unitary elastic.

THE COURT: May I interrupt just a moment. Unitless, just so that that's clear in the record, spell that.

THE WITNESS: Unitless, U-N-I-T-L-E-S-S.

THE COURT: All right. And so the beauty of that is we don't have to deal with hundredweight or pounds or tons or anything like that.

THE WITNESS: Spot on, Your Honor.

THE COURT: All right. Thank you.

BY MR. ROSENBAUM:

Q. And just to make sure we're all on the same page, it's a product is elastic if a 1% change in price results in a greater than 1% change in the amount and the quantity sold, correct?

A. Correct.

Q. Okay. Please continue.

A. Now, to provide background on my testimony today, one of the key things when it comes to milk is the emergence of plant-based milk alternatives. I'll use that phrase a lot, and maybe to shorten my words, I may use the acronym PBMA, plant-based milk alternatives.

And as you can see here on the screen, based on

data that we were made available to me by Circana, which used to be called Information Resources, Inc., and you can see clearly that during various periods, the market share for plant-based alternatives has increased from 7.75% in the pre-pandemic period. Over the period of June 28th, 2020, to May 15, 10.3%. And then after that time --

THE COURT: To May 15 of what year?

THE WITNESS: 2022.

THE COURT: Thank you.

THE WITNESS: And there is a typo on the last one, it should be March 22 -- or the May 15 should be March 15, 2022. My bad, Your Honor.

MR. ROSENBAUM: So -- and that's the middle?

THE WITNESS: The middle. It should be March 15, 2022.

MR. ROSENBAUM: Okay. Your Honor, if we could have that corrected.

THE COURT: Yes.

THE WITNESS: It's amazing. You go through these presentations, you think you got all the errors, but just to be clear.

THE COURT: So give me just a minute. We're in Exhibit 387. We're on page 4. We have gone to the middle blue rectangle. We're going to change the second date there that now says "May 15, 2022," going to change that to "March 15." Just all we're changing is May to March.

MR. ROSENBAUM: Exactly, Your Honor.

THE WITNESS: Correct.

THE COURT: All right. We're now doing that.

THE WITNESS: So what's the major takeaway? The major takeaway is that plant-based milk alternatives are a player in the market associated with milk products.

So in my analysis I was asked to talk about the own-price elasticity for fluid milk. Pretty complicated concept in the sense that if one were to take a stroll through the grocery store and go to the dairy aisle -- and I do that on a weekly basis because I'm the principal food shopper in my family -- if you go to the dairy category, what do you see? You see traditional white milk. You see traditional flavored milk -- or at least I do -- organic milk, lactose-free milk, health-enhanced milk, and --

THE COURT: What was that one?

THE WITNESS: Health-enhanced milk.

THE COURT: Health-enhanced?

THE WITNESS: Fairlife may be a good example of that. Okay?

So the disaggregation of the fluid milk category to me captures clearly what consumers face when shopping at retail outlets, but also you see these plant-based milk alternatives that I just described.

And in my analysis, rather than focusing on individual plant-based milk alternatives, I aggregated them. We had the data to do those. So we have a plant-based milk alternative category, which consists of, as you see here, almond, oat, cashew, coconut, rice, and soy.

But at the same time, other studies have shown, including some of my own, that you may also have other competitors to milk, milk being more than just a thirst quencher. Bottled water, refrigerated juices and drinks, and self-stable bottled juices, sport drinks, refrigerated yogurt, because yogurt often we have consumers perhaps using yogurt as a breakfast instead of milk in the cereal, and protein beverages, something like Muscle Milk.

So my analysis, bottom line, consists of 11 commodities for which I want to examine their demand interrelationships.

Now, as I point out here, I'm not going to spend much time on this. My testimony centers only on the U.S. However, I have done studies broken down by the eight Circana regional markets. The takeaway there is, there are commonalities between the national market and the regional market. There are some differences, but altogether a very similar type analyses.

So my testimony is only going to concentrate on the U.S., just as many of the studies that had been reported when own-price elasticities were estimated, they also concentrated on the national market.

THE COURT: So just for the record, when you mentioned Circana, C-I-R-C-A-N-A, what is that?

THE WITNESS: It's a third-party vendor of standard data that supermarkets supply to the third market vendor. The -- another vendor you may have heard, Nielsen is a vendor. But these data came from Circana, formerly

known as IRI, Information Resources, Inc.

BY MR. ROSENBAUM:

Q. And from that, can you get actual sales data for products in terms of their price and quantity sold?

A. Yes. In fact, working with scanner data is like taking a drink from a fire hydrant. I mean you are just inundated with information.

Q. Please continue.

A. Yes. So based on that, my research focuses on a granular array of not only fluid milk product segments, but also various alternatives. The -- and in doing that, not only do we -- are able to estimate own-price elasticities, which is the main course for this testimony, but importantly, you also get information about how the quantity in question could be affected by percentage changes in other prices, and that's called a cross-price elasticity.

Why would you examine cross-price elasticities? Good question. The reason you would is to be able to ascertain if the products together may be labeled as competitors or substitutes or complements -- complements with an E as opposed to an I. And complements meaning the products are purchased together. And as a result of that, not only do we have this granular array, but we also consider the pandemic.

In fact, the way this study was done, using the weekly data from Circana, and basically for these 11 products that I mentioned, data were provided on volume

dollar sales, average price per volume, total points of distribution. And these are weekly. And if you will note, the time period January 8, 2017 to August 13, 2023.

And in order to discern the impact of the COVID-19 pandemic on the own-price elasticities, as well as on the cross-price elasticities, I divided the lengthy dataset into three periods. The first period, clearly pre-COVID, January 8, 2017 to March 15, 2020. There's always some discussion in the literature, when -- where do you draw the line about pre-pandemic and then pandemic.

And you can see -- and if you can read the fine print. I'd be impressed with your eyesight. But another study developed by Zhao, Wang, Hu, and Zheng in 2022, that was their cutoff for weekly data. They weren't examining dairy products, they were examining meat products.

Then we have the COVID-affected period in red.

And then for lack of a better term, the moving-past-COVID period, May 22 of 2022 to August 13, 2023.

And once again, Your Honor, that May 15 should be March 15, 2022.

THE COURT: All right. So I'm on page -- oh, I'm on the slide that says --

THE WITNESS: Oh, no. Forget what I said. I'm wrong. What is -- what is put here is correct. It is correct.

THE COURT: Okay. Good.

THE WITNESS: My bad.

THE COURT: No, you're good.

THE WITNESS: I'm good so far.

THE COURT: Yeah.

Now, I'm just going to ask you to spell, in the fine print, where you cited these other studies, would you just give the court reporter the spelling of the Zhao, Wang.

THE WITNESS: Zhao, Z-H-A-O; Wang, W-A-N-G; Hu, H-U; and Zheng, Z-H-E-N-G, 2022.

THE COURT: Thank you.

THE WITNESS: Just wanted to demonstrate that there was no cavalier approach in breaking these periods. I think they appeal to one's intuition. And the whole purpose of that, once again, is to examine the impact of the pandemic on the -- on the set of elasticities that I'm going to share with you.

BY MR. ROSENBAUM:

Q. Please continue.

A. Okay. Now, you have already heard several times that I'm relying on data procured from Circana. So the question is, well, what coverage does Circana -- or even Nielsen, same issue -- and based on information that I received from Prime Consulting, May 2023, the syndicated retail data that I'm using constitutes about 64% of milk volume.

So what's the remaining 36% attributed to? Untracked retail, which is 12%. To give you an example of that, H-E-B is a prominent grocery store in the state of

Texas, headquartered in San Antonio. Very dominant in the state. They do not report data to Circana. They do not report data to IRI. And at times, other retailers fall into that same category, so that's where the 12% comes into play.

Does not cover foodservice. Does not cover schools. And these aren't my -- these are my words, but they came from the Prime Consulting report, "shrink or other."

So bottom line, what does that mean? The coverage that we're getting regarding milk volume is about 76%. Okay? And the foodservice category encompasses limited service restaurants, full service restaurants, and colleges, universities, long-term care, et cetera, et cetera.

So what is my approach? Well, you already have heard that I'm interested in those 11 products, the fluid milk being disaggregated into the five segments that I mentioned. But we're also including juices, which is the aggregate of shelf-stable bottled juices and refrigerated juices, bottled waters, sports drinks, PBMA, plant-based milk alternatives, and refrigerated yogurt.

Now, this work or my approach here is consistent with previous works where demands were estimated by Zhen, et al., Z-H-E-N, in 2014. And looking at 23 foods and beverages, again, using weekly scanner data just as I do, and their interest covered, for example -- I'm not going to list all 23 products -- but particularly for us, whole

milk and lower fat milks.

Additionally, another study in 2018 by Heng estimated the demand system for 15 beverages, including plain and fluid milk, once again, using weekly data.

So the notion of considering 11 products that I tried to justify is not farfetched. It's supported by the literature. And technically, the demand system, to capture these interrelationships, meaning you are going to have more than one equation to take a look at. Previous studies, many of them in the literature, look at one equation for fluid milk. Well, we have 11 equations.

And the system technically is known as the Barten Synthetic Demand Systems Model developed by Anton Barten from Rotterdam in 1993. I've used this model quite a bit, especially dealing with the weekly time series that I'm having.

And you might ask why. Well, it's a general representation of four major other demand systems. Those being something called an Almost Ideal Demand System, or AIDS model; another model called the Rotterdam Model; another model called the Central Bureau of Systems Model, or CBS Model; and one more, the National Bureau of Research Model, NBR.

So based on two parameters in that model, I can tell whether or not I have a general model, or maybe my model actually boils down to one of the four that I mentioned. So I like that because of its flexibility. Also, the model is predicated on log differences and

quantities and prices. And not to be too technical, that allows us to be working with data that are what statisticians would call stationary. In other words, the mean and variance do not change through time. That's a desirable attribute. It's not a requirement.

And then as I mentioned, I'm going to develop these own-price elasticities for the three distinct products.

THE COURT: Now, let me interrupt you. I'm on page 11. Are you?

THE WITNESS: Yes.

THE COURT: And Barten is spelled how?

THE WITNESS: B-A-R-T-E-N.

THE COURT: All right. And did you mean three products or three periods?

THE WITNESS: The own-price elasticities are derived for three periods.

THE COURT: Thank you.

THE WITNESS: There's 11 products, but that means there's going to be an 11-equation system for each of the three periods that I specified.

So in looking at presentations, unless you're me and really like looking at numbers -- most people don't, I understand, so I try to give you a pictorial view of what the own-price elasticities look like, associated with each of the 11 products by the three periods.

Putting myself in your shoes, my eyes would go to the fluid milk category. So if you look at traditional

white milk, which is still the 400-pound gorilla when it comes to fluid milk, look at the own-price elasticities: Negative .77, yes, inelastic in the pre-COVID period; negative .3 in the COVID period; and then as we move past COVID, it becomes elastic, negative 1.4.

And if you look at organic and health-enhanced, I'm not going to read the numbers, but the own-price elasticities increase.

If you look at traditional flavored milk -- and by the way, the literature has established that traditional flavored milk should be elastic. I found that in the pre-pandemic period and the COVID period, but interestingly in the moving-past-COVID period, it became inelastic. I have to be honest and say that is a bit of a surprise.

Lactose-free milk, all over the place: Highly inelastic pre-COVID; very elastic during COVID; and then still elastic, but not as sizeable.

Now, you may also be interested in the total milk category, so in order to make comparisons with previous studies. And I'll point out a comparison with Dr. Kaiser in particular. I developed a seven-equation system that has still for six products, everything you see to the right of fluid milk: Juices, bottled water, sports drinks, et cetera.

And then I aggregated the five segments into total milk. And, again, the principal reason for doing that, there aren't any studies that look at this granular array

of products, but many studies have looked at the total fluid milk category. So I asked myself, well, what would happen if we just considered total milk but still keep the competitors here, or other products in the demand system?

And as you see for total milk, my own-price elasticity: In the pre-COVID period, negative 1.1; in the pandemic period, negative .58; and then in the moving-past-COVID period, negative 1.26.

BY MR. ROSENBAUM:

Q. And just to clarify, that means that a 1% change in the price of total milk results in a 1.26% change in the amount of --

A. Amount of milk purchased.

Q. Thank you.

A. In the moving-past-COVID period.

Q. Yes. Thank you.

A. Right.

THE COURT: Excuse me just a second.

THE WITNESS: Right. And even if you looked at negative --

THE COURT: You say "results in." Am I seeing that the change in price results in the purchases or is it just correlated?

THE WITNESS: A -- technically a 1% change in price leads to a 1.26% change, corresponding change, in the quantity.

Let's put this in perspective here, because it's hard to sometimes for people to think about percent

changes. And I'll just make an assumption here. Let's suppose a gallon of milk costs $3, just for purposes. And let's suppose that price is going to rise to $3.30. That's a 10% increase in price. So everything else the same, as economists are often using, what that means, if the own-price elasticity is negative 1.26, now the percentage change in quantity is 12.6% owing to that 10% increase in the price of milk.

THE COURT: Thank you.

THE WITNESS: That's -- that's the interpretation, if you will, Your Honor, of the own-price elasticity.

THE COURT: Thank you.

BY MR. ROSENBAUM:

Q. Please continue.

A. And I mentioned a number of these things already. One thing I will emphasize, the own-price elasticities are not uniform across the three perspective periods. And the other statements on the page here I have already mentioned verbally, and I don't want to take your time.

Now, you might ask, well, it's just an artifact of my model. Well, there are other -- in fact, interestingly enough, in 2023, this year, publications came out, one of which was in the Journal of Agricultural and Resource Economics by Ghazaryan, Bonanno, and Carlson. Carlson is from the Economic Research Service.

They also used weekly data from IRI, because during the time of their study, IRI hadn't changed its name. And they used a different demand system than I,

Exact Affine Stone Index Demand System technically is what it's called.

But the bottom line is, they estimated own-price elasticities for skim milk, reduced fat milk, and whole milk. And if you will notice, I have bolded those own-price elasticities, they are all greater than one in absolute value, meaning they are elastic. Results were very similar to what I got.

In another study, I don't think it was published, it's a working paper out of Purdue University, but this time using data from Nielsen, Son and Jason Lusk, both prominent ag economists in our profession, estimated the own-price elasticity for regular dairy milk, regular dairy milk, to be negative .95, and for lactose-free milk, negative 1.39, which are values, especially in the moving-past period, similar to what I have.

Q. And just to make clear, these are the -- these two studies have -- are the documents that have been marked as Hearing Exhibits 389 and 390?

A. Right.

Q. And just to make clear, the work by Ghazaryan, G-H-A-Z-A-R-Y-A-N, that included an associate professor at Colorado State University; is that correct?

A. Yes.

Q. And Andrea Carlson, just to be clear, is at the Economic Research Service of USDA, correct?

A. Correct.

Q. And the study -- the other study by Son, S-O-N,

and Lusk, L-U-S-K -- Lusk is -- well, was at the time of the publication, which was only June of -- which is June of this year, was the head of the Agricultural Economics at Purdue University, correct?

A. Right now he's the dean of the College of Agriculture at Oklahoma State University.

Q. Please continue.

THE COURT: Before you do, where these names are shown is on page 14 of 387.

Did you say Carson or Carlson?

THE WITNESS: Carlson.

THE COURT: Thank you.

THE WITNESS: And the other point I would add on this page, you know, Andrea Carlson and Jason Lusk are prominent ag economists in the profession.

Now, so what are the major takeaways of my analysis? Trying to be clear and offer maybe additional light into why we got the results that we did. Fundamental economic principle is that when it comes to own-price elasticity, the greater the number of substitutes for any product, the greater the magnitude of the own-price elasticity.

Over my 40-year career, I have -- even in my own empirical work and others that I have either reviewed or participated in, I have never seen anything to refute this statement. So what do I mean by substitutes? Well, the number one substitute for any fluid milk product, even total milk, number one, bottled water. If you look at

sports drinks, also a substitute. If you look at refrigerated yogurt, also a substitute.

And then, since we have broken down fluid milk into those five segments, you have substitutability there between traditional white milk and organic milk, and traditional white milk and health-enhanced milk. So the point is, we have a number of substitutes. How do we know we have a number of substitutes? Although I don't -- haven't shown that information here, that's why I talked about cross-price elasticities.

And based on those substitution relationships, that explains, in part, why my own-price elasticity estimates that are reported are elastic, consistent with this principle. Or, you know, the point is, own-price elasticity is a positive and direct function of a number of substitutes.

And even if I combined fluid milk into a total category, as I mentioned before, we still see elastic responses in the pre-COVID period and the moving-past period. So that would suggest my results are at odds with the conventional wisdom in the literature revealing the fact that the demand for total milk was elastic, especially in the moving-past-COVID period.

Another takeaway, because of the pandemic, there was indeed a structural shift in the demand for fluid milk. I think it was obvious. No need to statistically test for it, although you could.

Another important point I want to emphasize here,

the two studies that were brought into play by Mr. Rosenbaum that I relied on to justify my results, the commonality was that weekly data were used -- weekly. There is a reason why we like to use weekly data. As I was saying, presumably consumers shop at retail outlets on a weekly basis rather than on a monthly, quarterly, annual basis, especially for milk and beverages. And in my view, the own-price elasticity based on weekly data represent a more realistic picture of the frequency of consumer shopping behavior.

Another fine point here is that elasticities that are based on shorter time frequencies are likely to be greater in magnitude than elasticities based on longer-term frequencies. There can be some differences there, but I have offered supporting documentation for that particular point.

Now, maybe to make the analysis come alive here a little bit, what I have done in my testimony is made a comparison provided by Dr. Harry Kaiser at Cornell, and based on Dr. Kaiser's testimony, here's what I took as a given: The National Milk Producers Federation proposal recommending increasing the Class I price by 8.6%. No challenge. A given. I also am not challenging the elasticity of price transmission from the farm level to the retail level to be close to .55% as calculated by Dr. Kaiser.

Now, you might want -- ask yourself, why do I need these two pieces of information? The 8.6% is the price

increase at the farm level. But in order to use the elasticities that I have generated, which are at the retail level, you are going to have to translate that percentage change in farm price to a corresponding percentage change in retail price. If you were to multiply the 8.6% by the .55%, that's where Dr. Kaiser suggests results in a 4.72% increase in the retail price for milk that, based on the 8.6% increase, the proposal.

And what the elasticity of price transmission denotes is another percentage change, but the percentage change in the retail price due to 1% change in the farm price.

So by the chain rule, if you wanted to be technical, multiplying those together gives us that 8.6% farm price increase, translating into a 4.72% increase in the retail price of milk.

BY MR. ROSENBAUM:

Q. And just to clarify, at this point, you and Dr. Kaiser are using the same numbers --

A. Same numbers.

Q. -- this far in your calculations?

A. Yes, sir.

Q. So now let's take it to the bottom half of that page 18.

A. Right. More hand waving here -- or mathematics, my apology -- but my products are not just a retail price of milk, although I have an aggregate category for milk.

So the question is: How do I translate further

that percentage change in the retail price of milk into the corresponding percentage change in the retail price for traditional white milk, organic milk, traditional flavored milk, lactose-free milk, and health-enhanced milk? To do that -- and the testimony here offers the details.

Q. You are pointing to Exhibit 386.

A. Yes, I'm sorry. Yes. You want me to give the page number?

Q. No, that's fine.

A. Okay. What I did is regressed the retail price of these five segments each as a function of the retail price. So at the end of the day I further got that 8.6%, which is a trigger, to give us ultimately at the retail level, the percentage changes in the traditional white milk, flavored milk, and the other segments.

What's the end result? The end result you see is a 6.28% decrease in the quantity purchased of white milk, 2.4% decrease in the quantity purchased of traditional flavored milk, 4.11% decrease in the purchase of organic milk, 2.75% decrease in the quantity purchased of lactose-free milk, and then finally, and maybe mercifully, 5.6% decrease in the quantity purchased of health-enhanced milk.

So owing to the fact that we still have -- owing to the fact that in the moving-past period, to be clear, because of -- except for traditional flavored milk, all the own-price elasticities were elastic, and that's why it

may surprise you to see such a percentage decrease in all the other milks as a result of my work.

But now let's go further and make a comparison directly to Harry Kaiser. Okay? He didn't break down fluid milk into the five categories; he just considered the category fluid milk. And if I were to do that, his 4.72% increase in price translates into almost a 6% decline in quantity purchased. And Dr. Kaiser's elasticities were negative .2 or negative .3. My own-price elasticity in the moving-past-COVID period, negative 1.26, much higher than Kaiser's calculations that were based on an average retail price elasticity from his literature review.

So he suggested that, based on his own-price elasticities, clearly in the inelastic range, the quantity of milk purchased would decline by 1.66% or by .95%. Notice mine is almost 6%.

Now -- and then based on my analysis even further, the 8.6% increase in Class I price would still lead to an increase in gross revenue for dairy farmers, because you have a higher price and the, remember the percentage change in quantity was almost 6%, but the price increase was 8.6%.

So in terms of gross revenue for dairy farmers, you still see an increase in gross revenues by about 2%, but that's much lower than the, you know, 6.8 to 7.6% increase in gross revenue for dairy farmers.

Q. Let me just interject a question here, which is,

obviously, you're projecting a roughly 6% decline in fluid milk sales as a result of the proposed price increase, correct?

A. I am.

Q. Now, that milk no longer being sold as fluid milk would have to find a home somewhere else or be dumped, correct?

A. There -- yeah, I would suppose that's the case. And there are many possibilities as to what to do with that.

Q. One possibility is that milk would go into what's generally thought of as the marketing clearing product, which is Class IV, nonfat dry milk.

Now, have you performed any analysis at all as to what impact that extra milk ending up in nonfat dry milk would have on the price of nonfat dry milk?

A. I haven't. I haven't considered Class II, Class III, or Class IV prices.

Q. Those -- would those be logical considerations for someone to think about when considering what the impact would be of this kind of decline?

A. There would. I might also add, what about the export market as a possibility? In previous ag policies, there was a public law, PL 480, where surplus commodities, not all of which were dairy, were used as giveaway for other countries. We also have the food and nutrition service SNAP program and WIC program. Perhaps there could be a donation of the surplus milk there. So that's what I

was saying, is there's many possibilities.

But you are, right, Mr. Rosenbaum, I did not consider anything but the impacts on Class I price.

Q. If you could continue on, please.

A. So -- and regarding the pandemic, aside from the previous study that the judge asked me to spell everyone's name, they worked on plant-based meat alternatives to beef, chicken, turkey, pork, fish, and other meats. They also did a pre-COVID and COVID-affected period. They used another demand system. I had mentioned this verbally, the Almost Ideal Demand System.

So the changes in that study, importantly, even though it was different products, different time period, were very congruent to those that I derived in my analysis. In other words, the own-price elasticities weren't uniform across those products; they were also elastic. So in my view, the credibility of their work reinforces mine.

Dr. Kaiser, as we have seen, testified that the demand for milk is inelastic. He offered a number of studies. There was one study, though, in his literature review that found the own-price elasticity for fluid milk to be negative 1.63, and the U.S. Dairy Sector model was -- the own-price elasticity there was estimated to be highly inelastic, but that estimate was arrived at using annual data from 1990 to 2020.

And of the 38 studies cited by Dr. Kaiser, only two were published after 2021, and most of the articles

covered the period 1964 to 2020. Only a few dealt with milk by fat type and organic milk. And these are very venerable studies, but they don't, in my view, reflect a current retail marketplace for milk.

If I'm asked to opine on the own-price elasticity of milk, I have to pit that to what is actually happening currently in the retail marketplace, and none of the studies cited by Dr. Kaiser considered health-enhanced milk or lactose-free milk. Understandably, for health-enhanced milk, since it's a relatively new product, and lactose-free milk has been around, but it's growing in stature.

A couple more points, Mr. Rosenbaum, and I'll be complete.

A lot of these data in previous studies, and rightly so, depend on the Agricultural Marketing Service to provide monthly estimated fluid milk product sales. I think everyone in this room is intimate with that. And the USDA data are available nationally and regionally, but for total milk, maybe organic milk, in the 11 Federal Milk Orders, but you can't get any more fine disaggregation than that.

And I would posit that the own-price elasticity for milk exclusively on data dealing with schools, colleges, universities, long-term care hospitals, and correctional institutions is highly inelastic, meaning I wouldn't expect much sensitivity concerning the quantities purchased with these outlets with respect to price

changes. And if my supposition is correct, the AMS use of those data should result in lower own-price elasticities than studies such as mine that depend on retail outlets.

And, again, the principal reason is that these studies which rely on the estimated fluid milk sales do not reflect the current retail price for market -- marketplace for milk.

So, in conclusion, the more accurate measurement, in my view, of the own-price elasticity that the FMMO system needs to consider, needs to view the current market conditions, more frequent information, i.e., weekly data regarding consumer behavior rather than quarterly, monthly, annual, and a consideration of the impacts, or moving past the impacts of the pandemic, and importantly, the primary competitors of various milk products like bottled waters, sports drinks, juices, refrigerated yogurt, plant-based milk alternatives, and protein beverages. And my research at present is the only study which fulfills these conditions.

Q. Obviously you have only completed your work very recently.

Do you intend to submit this for publication?

A. Yes. December is a month with two weeks in it, but as soon as December is over, I plan to submit this article to the American Journal of Ag Economics, which is the flagship journal in our profession.

MR. ROSENBAUM: Your Honor, Dr. Capps is available for cross-examination.

THE COURT: Five-minute stretch break, or ten?

MS. TAYLOR: Ten.

THE COURT: Ten. We need a ten-minute break to digest this, Dr. Capps. You are free to move about the ship.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record.

We're back on record at 2:25.

CROSS-EXAMINATION

BY MS. HANCOCK:

Q. Good afternoon, Dr. Capps. Just wanted to make sure my microphone is arranged.

I just wanted to chat --

THE COURT: And before you go forward, would you identify yourself?

MS. HANCOCK: I'm Nicole Hancock. I represent National Milk.

BY MS. HANCOCK:

Q. Thank you for being here today.

I want to take a look at your slide presentation that's marked as Exhibit 387 and just walk through a couple of items that are on here, make sure that I'm understanding some of the items that you have included.

You started off by, on page 3 of your slide presentation, providing us with a metric that if the calculation in determining price elasticity is greater than 1, that means the product is elastic, as it's reactive to that change; is that right?

A. Yeah. Yes, ma'am. Elastic in the sense that a percentage change, whatever the percentage change in price is, the corresponding change in quantity is bigger.

Q. Okay. And -- and if it's less than one, meaning that it has a less than that whole number, it would be considered inelastic?

A. Yes. Whatever the percentage change in price is, we often use 1%, but the corresponding percentage change would be lower --

Q. And --

A. -- in the opposite direction.

Q. And then unitary elastic, that's just if it's an absolute equal one-to-one?

A. One-to-one.

Q. Okay. And then, the IRI study, let's see, it's now called Circana; is that right?

A. Yes.

Q. When did you first start utilizing IRI as a database that you use to establish elasticity?

A. In my career?

Q. Yeah.

A. You know, I -- I go back to working with standard data, that is data that are available from supermarkets, all the way back to 1986.

Q. Okay. You have been using the IRI data since 1986?

A. Not just the IRI data. We also, in our center at AFCERC, we're regular subscribers to Nielsen data. We pay

an annual fee of $7,000 to get access to Nielsen data.

Q. Is IRI a subscriber-based database as well?

A. I don't know. I have -- most of the time that I have used IRI, it's been based on consulting arrangements.

Q. Okay. Well, and that's -- that's fair.

So in this situation, is the reason that you were able to use IRI because you were acting in the consulting capacity?

A. Yes. But even if I had a regular subscription as I do with Nielsen, we are prohibited from using the Nielsen data, for example, to do any consulting unless approved by Nielsen.

Q. Okay. And have you ever asked Nielsen for approval to do any private consulting?

A. No.

Q. And do you have to ask IRI for permission to do private consulting?

A. I didn't have to ask. The data were purchased. As long as IRI got their purchase amounts, we were free to use the data.

Q. How much does it cost to purchase access to the IRI data?

A. I did not -- I was not involved in the purchase.

Q. Who purchased it?

A. Presumably IDFA.

Q. Do you know when they purchased it?

A. Well, obviously beginning in 2022, because we had asked for historical data back to 2017, I remember that.

There were two purchases, two -- for two periods. The moving-past-COVID period was an add-on to a previous study that I had done for the first two periods, the pre-pandemic and the COVID period. We added more data.

Q. Okay. So what -- maybe I should back up a little bit even further.

When were you first hired by IDFA to provide expert analysis on the elasticity of fluid milk?

A. Sometime last year. But it wasn't just myself, there was a colleague, Ariun Ishdorj, she did an exhaustive literature view of previous studies dealing with fluid milk. Jointly we looked at the data together for -- to do the demand systems analysis, although I was the one that was solely involved in that.

Q. Okay. So help me understand what you and your colleague -- what was her name again?

A. Ariun, A-R-I-U-N; Ishdorj, I-S-H-D-O-R-J.

Q. Okay. And were you hired at the same time together by IDFA?

A. She was the principal, and I became the subcontractor to her.

Q. Okay. And that was in 2022?

A. I believe. I would have to -- I believe that's true, but I'd have to check my records for accuracy.

Q. Okay. And at some point did you -- you said you became the primary?

A. Yes.

Q. How did that arise?

A. Well, the question that was begged is, while we had a pre-pandemic period and a COVID period, the question was, well, what does the behavior look like once we move past COVID?

And in the original data acquisition, well, we didn't have any data past May 15, 2022. So I asked for data from May 22, 2022, to August 13, 2023, weekly data, for the same -- for the same categories that we had initially used previously just to see what the behavior would look like in the moving-past period, which is the current, what I would say the current state of the retail marketplace.

Q. Okay. So for your work with IDFA -- is it Dr. Ishdorj?

A. Yes.

Q. -- Dr. Ishdorj and you had done an initial request for data through IRI that IDFA purchased that took you through the May 15th of 2022 time period?

A. Yes.

Q. And then some time after you did that analysis, Dr. Ishdorj no longer was working on the project and you continued on and made another request that went from May 2022 until August of 2023?

A. Yes.

Q. And you don't know how much that data cost from IRI on either scenario; is that right?

A. I do not.

Q. And how does that information or that data from

IRI, or what is now Circana, how was that delivered to you? Was that electronic?

A. Electronic delivery.

Q. And is it in the form of spreadsheets or how was the information relayed to you?

A. A myriad of spreadsheets.

Q. Okay. And then you analyzed that and distilled that down into what we have talked about today?

A. Correct.

Q. Did you have a team of other people working with you when you were analyzing that or did you do the work yourself?

A. I'm the only person that ever touched the data or saw the data.

Q. You did that as a consultant working for IDFA?

A. Yes.

Q. Did you do that as a part of your work with Texas A&M or through your own private consulting firm?

A. It was outside the Texas A&M system. So technically, yes, through my company, Forecasting and Business Analytics, LLC.

Q. Okay. And then the work that you have put together then, that's on your own individual behalf, not on behalf of Texas A&M; is that right?

A. My own.

Q. Okay. And in totality, how much have you been paid for the services that you have been providing to IDFA to do this elasticity analysis?

A. $40,000.

Q. And does that catch you up to date or is that just historically what you have been paid already?

A. Up to date is -- except for my testimony today and presumably tomorrow.

Q. Why not.

Okay. Let's turn to page 9 of your -- of your PowerPoint presentation in Exhibit 387.

Was IRI acquired or sold to Circana? Is that -- was that the basis of the name change?

A. I really don't know when it happened, and it was very quick. For a long, long time it was IRI, and then you turned your head and IRI became Circana. So I really don't know anything about the name change and why it came about.

Q. And you said that you had been using it since the 1980s. I'm wondering if you can tell me any other time in which you have acquired the IRI data for any of the elasticity work that you have done historically?

A. Well, when I mentioned the Kellogg's work, well, even though it was for Kellogg's, they wanted us to do a case study for orange juice. So in that case we needed outside information, and the proprietor there was IRI. There may be others, but I would have to consult my records.

Routinely, if I'm going to use scanner data, there's two vendors, Nielsen or IRI. And many of the cases, especially through AFCERC, because of our

subscription to Nielsen, I rely more on Nielsen. But they are very similar in terms of what they capture, the products, et cetera.

Q. And I think you told me that you had never used Nielsen for your private consulting work because you have never asked them for permission; is that right?

A. Well, as a subscriber, I'm prohibited. There's a contract that we have to follow, and the contract said no outside consulting. However, if IDFA chose to buy Nielsen data and they would allow me to do that as a separate entity, but I cannot use my subscription service to do any consulting work.

Q. Okay. So then back to the IRI data.

You said that you recalled using it one time for Kellogg's when you were doing a case study for orange juice.

Can you think of any time where you have used the IRI data for an elasticity of fluid milk?

A. I have not.

Q. If we look at page 9 on your PowerPoint presentation in Exhibit 387, you gave us the breakdown in the percentages of the milk that IRI, or Circana, captures in its database; is that right?

A. Yes.

Q. And so if I'm understanding these percentages correctly, it's 64% of the total milk volume for the retail data is captured by that IRI database; is that right?

A. Well, not alone. They also -- they have untracked retail. I mentioned that H-E-B doesn't sell the data, so that wouldn't be a part of that. But there may be other retailers that want to remain anonymous and they participate. So that's what is meant by untracked data. Hence, if you add the 64% and the 12%, that's why you get 76% of milk volume coverage.

Q. Okay. So I'm not quite there. I'm going to get there, but I'm not quite there. I'm still on the 64%.

A. Okay.

Q. You said H-E-B.

Is that -- did you say H-E-B?

A. I did.

Q. And what were you referring to there?

A. They are a large retail grocery store that don't allow their data to be used by Circana, Nielsen, et cetera. But other retailers would, but they don't want to be labeled.

Q. Okay.

A. And hence, untracked retail.

Q. Okay. And so that's in the 36%; is that right?

A. That's in the 12%. It's -- it's a third of the remaining 36%.

Q. Okay. So I'm back up at -- first just make sure I'm clear on the 64%.

So the IRI data that you have access to, that's retail -- that's all retail data; is that right?

A. All retail.

Q. And that retail data that you get from IRI constitutes 64% of the total fluid milk volume?
A. Where the retailers are actually identified.
Q. Okay. So that -- thanks for that.
So it's 64% of the retailers identified?
A. Yes.
Q. Okay. And then of the retailers that are not identified, that's the 36% that's then broken down with 12% untracked retail, 15% foodservice, 8% schools, 1% shrink or other?
A. Well, not entirely. Not the whole 36%. But 12%, or one-third, of that 36% is from unidentified retailers.
Q. And you said H-E-B was one of those?
A. H-E-B is not one of those. They don't participate.
Q. Oh, so H-E-B is not even included in this?
A. Correct.
Q. And then there's other retailers that are included that just don't want to be identified?
A. That's correct.
Q. Would Costco be one of those?
A. I have no idea.
Q. Okay. So you don't even on your industry knowledge know who those untracked retail accounts would be, do you?
A. The only reason I know about H-E-B is that we do a lot of work for them from the university. They allow us to use their data at times, not always. But they don't

participate with either Nielsen or IRI.

Q. Do you know if there's other retail accounts that are not included in IRI?

A. You'd have to ask the Circana folks on that.

Q. Okay. I'm just asking if you know.

A. No, I don't know.

Q. Okay. Do you know if Costco is one of the retail outlets that is included and reported in the IRI data?

A. I do not know.

Q. Okay. What about Starbucks, do you know if they are included?

A. I do not know.

Q. And then schools would not be included, you know that?

A. Yes, schools for sure, because we're talking about data from retail outlets, so schools wouldn't fall into that category.

Q. Okay. And so do you know as you sit here today what percentage of the total fluid milk sales in the U.S. is captured or analyzed in the IRI materials?

A. Just as I stated, 76%.

Q. Would you --

A. And that's documented, not by me -- and if you will note, I have relied on Prime Consulting in a May 2023 document that I had, where they broke down, not in the detail that you would like based on your earlier questions, but that's where I got these numbers.

Q. Well, this says 76% of the milk volume sold at

retail outlets, right?

A. Yes.

Q. So this isn't 76% of the total fluid milk that's produced in the country, is it?

A. No.

Q. Okay. And so my question was, do you know what percentage of the total fluid milk that's produced in the U.S. is reflected in the IRI database?

A. Oh, I still think it's likely it's about 76%, because the other 24% are coming from foodservice, schools, and other places based on the Prime Consulting document.

Q. Okay. So you think that it's 76% of the retail outlets -- or 76% of the milk volume that's sold at retail outlets, you think that that also reflects 76% of the total fluid milk in the country?

A. Yes, Nicole, think about it. Here (indicating) is the milk being produced, and it's ultimately going to be sold. Where is it sold? Retail outlets, foodservice, schools, others, just as we have mentioned here.

Now, we don't have all of the retail outlets, because H-E-B, for example, is a counter-example to that.

So I -- I think the volume that I state here, you know, is reasonable to presume, to me, that 76% maybe is the upper bound, but the actual figure is probably not far removed from that.

Q. So of the 64% that you have described here of the milk volume, that remaining 36% you stated at the end of

your presentation, you believed would be inelastic; is that accurate?

A. You mean the demand for milk sold at those outlets? Yes. That -- and that was a hypothesis that I put forward. I haven't seen any work to suggest that. But if -- you know, I have been involved with schools, and I work a little bit with foodservice, and I have often been told is, there's not typically that much negotiation when it comes to various individual products, and they even mention particularly data. I'm talking about discussions with Sysco, for example, the largest foodservice purveyor in the world, right there in Houston, close to where we are, and it's just personal communication.

And because of that -- all right? Sounds reasonable to me. The school needs their milk. McDonald's needs their milk for their Happy Meal. Okay, there may be some, but we're not talking about, you know, being quite sensitive to changes in prices, because milk is not a dominant item at McDonald's. Milk is not the dominant item at schools. And -- and often when you consider those cases, it's not unreasonable to posit an inelastic demand for those products.

Q. Okay. And so when you are reporting on the IRI, you are reporting not on those inelastic 36%, but on that -- that prior category that you have on page 9, the 64%; is that right?

A. Well, actually the 76%.

Q. Do you know if Walmart is tracked in that 64%?
A. I don't know except in my career, Walmart is finicky.
Q. Like H-E-B?
A. Well, not -- not exactly. In the study that I mentioned on orange juice, up until September 1996, Walmart refused to participate. Something magical happened after September 1996, and suddenly we have Walmart data. I mean, I'm typically not the one doing the ask for the data, because our budget couldn't afford the price tag. But for those that are involved, you know, that was the situation for Walmart.

But to answer your question -- sorry about the -- going down the rabbit hole -- I don't know if Walmart is part of this dataset.

Q. Okay. And what about Sam's Club?
A. Similar. I have no idea.
Q. And you mention Sysco Foods.

Do you know if they are included in the IRI dataset?

A. Definitely not.
Q. Because that's what services the foodservice.
A. Yes.
Q. Okay. Let's take a look at -- oh, you had mentioned one of the reasons that you liked -- that you used the Barten Synthetic Demand Model was that you liked that the mean and variance don't change with time.

Do I have that correct in my notes?

A. The mean and variance of prices, quantities, and total expenditure. Those are the prime, although not the only components, involved in the demand systems analysis.

Q. And is the reason that you like those to be static is because it gives you a control group to be able to -- to evaluate over time?

A. No. The key term is stationary. I don't have to worry about trends in those data that could be colinear, if you will, with other factors. And colinearity could be a problem because if there's colinearity, that could influence the magnitude and the sign of your estimated coefficients. But the nice thing about the Barten Synthetic Model, it handles that.

Now, other demand systems that don't have that property, often they have to do some other manipulations so as to avoid this colinearity aspect I was talking about.

So other demand systems are fine, even though they are not producing stationarity and prices, quantities, and total expenditure. Those being the Almost Ideal System, the Exact Stone -- Affine Stone Index Model I mentioned. There's another, Quadratic AIDS model. These are the prime candidates for demand systems.

But the Barten Model has this unique property of we already are taking care of stationarity without other adjustments that the other demand systems would have to make.

Q. Okay. So it gives you that -- it gives you kind

of that stationary or that fixed control group to allow you to compare over time without thinking that there's other external influencing factors.

A. I wouldn't use the term control group. There's no control group.

Q. Okay. So maybe --

A. We're talking about no trends. You don't have to worry about trends in --

Q. Okay.

A. -- quantities, prices, and total expenditure because of the use of log differences.

Q. Okay.

THE COURT: May I stop you there? I'm looking at page 11. You mentioned Barten, you mentioned Stone, and then you mentioned another company I didn't quite catch.

THE WITNESS: Not a company, Judge, a demand system. Almost Ideal Demand System or Quadratic Almost Ideal Demand System.

THE COURT: Yes. And you did identify that one in your slide presentation. Thank you.

BY MS. HANCOCK:

Q. I want to look at -- at the results that you have on, I think it's page 12, where you have your bar graph. And these are the three timeframes that you have evaluated pre-COVID, COVID-affected, and moving past COVID; is that right?

A. Yes.

Q. And so if we look at the fluid milk side, so the

blue columns, for total milk for pre-COVID, you have that at negative 1.10; is that right?

A. Yes.

Q. So would you consider that to be mildly elastic?

A. Elastic.

Q. So not mildly, just regular elastic.

A. Elastic.

Q. Okay. You wouldn't qualify that?

A. Economists don't use adjectives.

Q. Okay. Well, I thought that -- I thought you did actually use an adjective, because when you talked about lactose-free, I think you said it was very elastic when it was at $4.11, didn't you?

A. I may have done that.

Q. Okay. So not as a general rule, you don't have -- it's not like how Portland describes rain, where there's 12 different ways to describe it. You just call it elastic or inelastic?

A. Well, as I said on page 2, it's either elastic, unitary elastic, or inelastic, just being technical.

Q. And it's a hard line at the 1; is that fair?

A. Yes. And importantly, I should offer statistically different from 1. I mean, so you might ask, well, is negative 1.1 actually 1? Well, there is statistical tests that we do to determine if it's really statistically 1 or is it really negative 1.1? And all of these have been -- you know, we have looked at statistical tests associated with them, so we don't have to worry

about any of these being unitary elastic, for example, even though the total milk own-price elasticity that we cited was negative 1.1.

Q. And so the COVID-affected period would be inelastic for total milk?

A. Yes.

Q. And then the post-COVID would be back to elastic?

A. Yes.

Q. And for organic milk, it starts off in the pre-COVID as inelastic, and then goes into the next two periods for COVID and past-COVID to being elastic?

A. Yes.

Q. And enhanced-health (sic), is that those muscle shakes that you were talking about?

A. Health-enhanced.

Q. Or health-enhanced?

A. Probably best example is Fairlife.

Q. Okay. So Fairlife would fall into that category, health-enhanced?

A. I believe.

Q. What about lactose-free?

A. As the name suggests, milk without lactose.

Q. So if Fairlife had a lactose-free product, would that be in health-enhanced or would that be in lactose-free?

A. That's a good question. I would have to consult my notes on that.

But my recollection tells me, when we calculated

lactose-free, we excluded explicitly Fairlife. Therefore, Fairlife would be in the health-enhanced category.

Q. Do you know what percentage of the total milk is comprised of the traditional white?

A. Based on my analysis?

Q. On the analysis that you have reported in on page 12 in your Exhibit 387.

A. Will you allow me to go directly to my testimony?

Q. Sure.

A. Because I have a table that speaks directly to that.

Q. That would be great.

Are you talking about Exhibit 386?

A. I am. I'm sorry, I have to provide the exhibit numbers.

Q. That's okay. Just want to make sure our record is clear.

And then if you just let us know what page you are turning to.

A. Yes, ma'am. It will be page 6, Table 1.

Q. And so for the -- of the total milk, how much is comprised of traditional white?

A. Well, you will see for total milk there are three columns corresponding to each of the periods, right? So for total milk we had 65% of the quantity -- or 60 -- not 65% -- 65.39 million gallons; in the COVID-affected period, 60.24 million gallons; in the moving-past period, 56.9 million gallons.

Q. Okay. So you don't know what percentage -- well, let's start -- let me say this differently then. For each time period, the percentage of traditional white milk, and for all the other varietals that you have noted here, would make up a different percentage of the total milk?

A. Well, put another way, if you were to add -- let's just pick a period. Okay? Let's pick the pre-COVID period. So in total there's 65.39 million gallons. And if you were to add the quantity for traditional white milk, organic milk, traditional flavored milk, health-enhanced milk, and lactose-free milk, that should sum pretty close to the total milk, if not exact. I don't know. You have a calculator in front of you.

Q. Okay. So my math suggests that for pre-COVID, traditional white milk would make up 83.2% of the total milk.

Does that sound right?

A. Yes. If you take 54.39 and divide by 65.39 and multiply that by 100.

Q. Okay. Is it fair to say that traditional milk makes up the largest percentage of the total milk across all time periods?

A. Absolutely.

Q. And did you, for total milk, do a weighted average when you were establishing the elasticity that you have noted on your bar chart?

A. No need.

Q. And why is that?

A. Because elasticities are unitless measures.

Now, each of the commodities here, the typical unit of measurement are gallons. But that isn't the case, for example, for juices or sport drinks or refrigerated yogurt, which is measured in pints. But when you put the data together in the system and the elasticity is generated, we don't have to worry about units of measurement.

Q. So when you -- I'm just -- so maybe you just have to bear with me and pretend like I'm a student of yours, but I'm just trying to understand.

When you have, for example, in your pre-COVID period, negative 1.10 for total milk as the elasticity, I'm trying to make sense of that when I see that 83.2% is at an inelastic .77.

A. I think I understand the notion of your question now.

As I mentioned in my testimony, you're thinking that if I just took a weighted average of the elasticity based on my 11-commodity system, that would give me the elasticity for total milk.

But as I testified, to get the elasticity for total milk, that was actually a separate demand system, still using the Barten Model, but now a seven-equation demand system, where total milk was the aggregate category and the other six were juices, bottled water, sport drinks, et cetera.

So that negative 1.1 or negative .58 or negative

1.26 for total milk is not a weighted average of the elasticities of the segments that were part of the 11 (sic) demand system.

Q. So that would take into account the alternative beverages as well, and that's why the elasticity is greater for total milk?

A. Well -- well, the elasticity accounts for the alternative beverages and yogurt, but all the individual segments, those five individual segments, are collapsed into total milk.

Q. Okay.

A. And the only reason I did that was to, down the road, make a comparison with Dr. Kaiser, which I have testified.

Q. Okay. So I might have to come back to this to make sure I understand it, so just bear with me on it. Maybe I'm a little slow to get that one, but I'm going to get there.

Okay. Okay. Let's turn to page 14. I want to just -- you have your major takeaways --

A. 14 of the PowerPoint?

Q. Thank you. Yes, Exhibit 387 on the PowerPoint.

And you have major takeaways, but then the paragraph here looks like it is citing from a couple of other studies, and I want to make sure I understand this.

So you have -- the first sentence there says, "Using a demand systems analysis," and you cite to the Ghazaryan-authored study, estimated the price elasticities

for the time period between 2012 and 2017 to be $1.30 for skim milk -- I'm sorry, not $1.30 -- to be negative 1.30 for skim milk, negative 1.67 for reduced fat, and negative 1.45 for whole milk; is that right?

A. Yes.

Q. And you have this under your major takeaways.

Were you saying that you were able to replicate that study in your IRI analysis?

A. No. My -- my major takeaway is that the last bolded sentence on the third paragraph, "the demands for disaggregated milk products" -- from my analysis -- "are sensitive to changes in prices." I'm just using these two studies done in 2023 to report that while their results are very similar to mine, so -- and I guess in formulating the PowerPoint, I should have had the paragraph starting with "each" before the paragraph starting with "using a demand systems approach."

Q. Okay. So that's just the basis for making you feel like your information was more credible because you found other studies that came to similar ranges; is that fair?

A. Well, I'm always confident in my work, and it's nice to have corroboration. Although, I have stood alone in other studies, too. But I stand behind the work that I did.

Q. It's fair to say you are not afraid to stand alone?

A. I'm not afraid.

Q. Okay. And then you also cite to a study by Nielsen that was published in 2023 for the period of March of 2018 to 2022.

And in that study, Nielsen came up with a conclusion that regular dairy milk was inelastic; is that right?

A. Almost. Nielsen was the data they used. They didn't use IRI. Son and Lusk were the -- were the authors of that working paper.

And you're right, based on the Almost Ideal Demand System Model, they did find the own-price elasticity for regular dairy milk to be .95 and for lactose-free to be negative 1.39.

Q. Okay. And that would mean that regular dairy milk in that study is inelastic; is that right?

A. Yes.

Q. And I didn't realize that Nielsen there meant the study. That doesn't mean that's one of the authors?

A. I probably shouldn't have bolded Nielsen.

Q. Okay. So Nielsen would have just been the database that Son and Lusk used in order to come up with that inelastic regular price analysis?

A. In their analysis.

And the other commonality between these studies, importantly in my view, they used weekly data.

Q. Okay. And I think you talked about that in a part of your testimony, that it was important for you to have the use of weekly data as well; is that right?

A. If I really wanted to get a handle on what is actually happening in the retail marketplace. And the principal presumption for that, everybody shops differently. I'm just using myself as a test case. Every week, you know, I'll march into a grocery store. And I like that, because I deal a lot with scanner data. I want to see the products, not just dairy products; there are other products that I work with, too. But my frequency for shopping is weekly. And just, you know, talking among my friends, they do -- do essentially the same thing.

I -- I don't have any idea what percentage of the population shops weekly, monthly, quarterly. I can't imagine it would be on a quarterly or annual basis. I mean, if you are talking about grocery shopping and not just the purchase of turkeys around Thanksgiving or Christmas.

So to me, the weekly timeframe, again, to get the picture of what's happening in terms of consumer behavior at the retail marketplace, the weekly timeframe makes a lot of sense to me. And not just me, other -- other analysts have done the same thing.

Q. And in your experience, do the prices in the retail outlets change on a weekly basis?

A. Some do; some don't.

Q. More common that they would change, if they are going to change, on more of a monthly basis or seasonal basis?

A. Well, you got to remember there's a number --

well, let's pick any of the categories. Let's just take traditional white milk, right? There are different UPCs. So when Circana puts together the weekly amount of movement in terms of gallons and the amount of sales, they are aggregating all of the UPCs that make up the traditional white milk category.

And the price that is offered, in fact, in my testimony, I say Circana offers average prices, that's a weighted average price. You know, where you take the dollar sales that have been aggregated off all over the UPCs that make up the white milk category, divided by the aggregate of all the gallons of the UPCs associated with white milk, and there you get an average retail price.

So I would imagine there's some UPCs that prices don't change in a week, but others could. And, therefore, if we were to examine -- I didn't do it -- but it wouldn't surprise me upon further examination, if I looked at the average prices of any of the 11 categories I'm using, no two would be exactly the same from one week to the other.

Q. Okay. Not a huge volatile shift, but there could be small changes that would happen?

A. There could be. I know you have been to the grocery store lately. I'm -- and I'm an economist, and I'm shocked when I check out. You know, how much did I buy? Really? That much? Whereas a year ago I wasn't seeing that much of a change.

So given the fact that we have had inflation, although fortunately it's become a little more modest, but

still, you could see some run-up in prices attributed to that. But that's not the only factor that could affect prices, either.

Q. When you talk about inflation, that's inflation across the board for all products since the pandemic; is that right?

A. That's right.

Q. And you, on page 17 of your presentation, you talk about the pandemic created a structural shift in the demand for fluid milk.

What's the structural shift that you are describing there?

A. Technically, economists would say time-varying parameters. If there were no structural shift, key parameters like the own-price elasticity, you know, would not change much. They are not going to be exactly the same. But when you see, you know, the -- and you saw the pictorial representation I had. I think everyone would agree, at least for the fluid milk products -- it's interesting that for the alternative beverages, for many of them, their own-price elasticities didn't change much, but for fluid milk, that was not the case.

Q. Okay. And how did the pandemic exacerbate that issue?

A. Well, I don't know about exacerbating the issue, but, you know, why did it bring about a structural change? When consumers, especially with young children, are forced to stay home, now maybe they would be able to purchase

more milk than they had before. And also, there could be some possibility that they would be willing to pay more for a product just in order to be able to get it, because oftentimes the product may not be on the shelves during the pandemic.

Q. And -- and the whole supply chain was affected in a similar way, in that there were a lot of supply issues during the pandemic; is that right?

A. Just based on my reading, I don't have firsthand knowledge, but just as a --

Q. Based on your trips to the grocery store?

A. Yes, based on my trips to the grocery store, you bet.

Q. Okay. And -- and some of the highest inflation that we have seen over the last 40 years occurred as a result of the pandemic?

A. No. Did not occur because of the pandemic.

Q. You think that it was other factors, too?

A. I think there were definite other factors.

Q. Do you think that the pandemic contributed to that as well?

A. The -- if you -- you have got several questions going on. Let me see if I can tackle them.

If you are asking me what do I think is behind inflation? The rise in energy prices, principally the major factor by far. Why is that? Well, we have to transport the product from the farm to the consumer. Well, that takes energy. For milk and other beverages, we

have to refrigerate it. That takes energy. And none of that has anything to do with the pandemic.

Q. Okay. That's just independent of it and happened to coincide with the supply chain issues with the pandemic?

A. But the inflation actually took place a little bit later after the pandemic. I mean, everybody's in disagreement about beginning and ending of the pandemic. The beginning of the pandemic, according to many, was March 15, 2020. The end was May 13th, 2023, by the CDC.

That said, I have a close friend who has COVID right now.

So have we moved past COVID? That's just a rhetorical question.

Q. And that was a question that I had on here. You have the past-COVID period as listed between May 22nd of 2022, and August 13th of 2023, but it sounds like that might be not the actual end date. It's just continuing to be this post-pandemic period?

A. Well, that's why we called it the moving-past-COVID period. I didn't say COVID was over.

Q. Okay.

A. But politically, you know, CDC, current administration, they were touting the end of COVID. Well, we're not saying that. We're just saying moving past COVID.

Q. Is it fair to say that we're still in a period of volatility?

A. What volatility are you referring, to what --

Q. To the market in general, to the inflationary costs, to the supply chain issues, to things that are affected by the pandemic.

A. I would say the disruptions that we saw in the supply chain eased quite a bit in the moving-past-COVID period relative to the pandemic or the COVID period.

Q. So the structural shift that you have said occurred as a result of the pandemic, do you think that that's stabilized?

A. If you define stabilization in terms of disruptions in the supply chain, I think we -- we see that. But there's still reported cases of COVID, so I would never call it the end of COVID, as the CDC declared.

Q. What about on the structural shift in the effects on consumers' buying behaviors?

A. Well, because of the pandemic, kids couldn't go to school, so they couldn't rely -- if they were in low-income families participating in food nutrition service programs like school breakfast or national school lunch program, that they are not getting milk there. So they were getting milk at home.

But even for folks that wouldn't have qualified for those programs, the kids were at home. And particularly for breakfast, maybe that meant -- and, again, this is just speculation on my part, but I think reasonable -- milk was more prevalent if you could find it, if it was available on the shelf. Okay?

So that's what I think the pandemic brought to the table that you didn't see in the pre-pandemic period or the moving-past period, because now children were allowed to go to school.

Q. Okay.

MS. HANCOCK: Let's mark an exhibit here really quick.

THE COURT: Next exhibit number is 391. Thank you.

(Thereafter, Exhibit Number 391 was marked for identification.)

THE COURT: We'll go off the record in just a moment to distribute those, but I have marked as NMPF-105 as Exhibit 391.

Let's go off record.

(An off-the-record discussion took place.)

THE COURT: We're back on record at 3:17.

Ms. Hancock.

BY MS. HANCOCK:

Q. Dr. Capps, we have provided you with Exhibit 391. This comes from the U.S. Bureau of Labor Statistics and the Consumer Price Indices.

Are you familiar with that database?

A. Yes.

Q. Have you ever looked to that as a resource?

A. At times, but not for this analysis.

Q. Okay. And so if we look at the time period that you have identified as moving past COVID, that's May of

2022 through August of 2023, for milk prices, that was somewhat of anomalous period; would you agree?

A. Anomalous in what sense?

Q. Compared to historical prices.

A. Well, if you look at the January, February, March, and April of 2022, I still see high prices there, and that wasn't part of what I call the moving-past-COVID period.

Q. Right.

A. Further, these data are year-over-year percentage increases. What I report are the -- on that Table 1, back to my original deposition (sic) on page 6, were the average prices. I did not calculate a year-over-year price.

Q. And that you -- you said "deposition," but you mean your written testimony in Exhibit 386?

A. I did. I'm sorry. I'm going to have to use those numbers a little better. Exhibit 386, page 6, Table 1.

Q. Okay. And so your -- in your experience, you are not familiar with whether the time period that you have identified as "moving past COVID" is the period of time in which milk prices peaked?

A. Well, let's go back to Exhibit 386, page 6, Table 1, right?

In the -- consider the price column, and consider total milk, because you have a column here from BLS for all fluid milk. Total milk average price, pre-COVID, 3.79; average price, COVID-affected, 4.31; average price, moving past COVID, 4.95. Prices rose on average.

Same thing is true in every case of each of the five milk segments: Traditional white, organic, traditional flavored, health-enhanced, lactose-free milk. We're not comparing the same items, though, because you have year-over-year increases, and what I'm reporting are average prices starting during the period.

But you can see that prices, indeed, have risen across the three periods. Again, not year over year, just on average. And that is consistent up until, I suppose, March of '23 with your year-over-year increases.

Q. And then they began to taper at the end of the time period that you identified as your post -- or your moving-past-COVID period; is that right?

A. Yes. You know, based on the data that you have. But, again, your data, we're comparing apples and oranges -- I hate that phrase -- but you have year-over-year increases. I'm talking about average prices during the period. They are not the same.

Q. Okay. So then let's take a step back and just talk about your knowledge.

Is it true to say that beginning in April of 2023, that the prices of milk began to taper off of the higher prices that had been experienced the year prior?

A. Based on the data you laid before me in terms of the BLS?

Q. I'm asking you based on your experience in the work that you do as an economist.

A. My experience, you know, I didn't pay close

attention to individual products, I focused on the all items. And as I mentioned previously, inflation was rampant, and then suddenly has begun to drop, and that's exactly what we see here on the second column of all items of Exhibit -- what is it, 394?

THE COURT: 391.

THE WITNESS: 391. Okay. So what I see here, based on the all items column, yes, I -- I wouldn't challenge BLS. I wouldn't do it anyway.

BY MS. HANCOCK:

Q. Okay. So let's -- so in your testimony in Exhibit 386, this is your written testimony. Let's look at page 4. And this is talking about that 36% of the milk that is not reflected in the IRI. And you state that, "The own-price elasticity of milk based on" -- "or based exclusively on data dealing with schools, colleges/universities, long-term care, and senior living, hospitals, and correctional institutions is likely to be highly inelastic."

Do you see that?

THE COURT: Adverb.

THE WITNESS: I'm sorry?

MS. HANCOCK: You did use an adverb there; is that right? Nothing gets past Judge Clifton, by the way.

THE WITNESS: But I said "adjective."

MS. HANCOCK: You said adjective.

THE COURT: Oh. That's true.

MS. HANCOCK: I guess it really would be an

adjective, right? Because inelastic is not a verb, so it would be an adjective here, right?

THE COURT: That's true.

THE WITNESS: Would be likely to be low.

BY MS. HANCOCK:

Q. Okay. What is -- what is "highly inelastic"? Can you quantify the range that would fall into "highly inelastic"?

A. You know, just -- my experience would be negative .1, negative .2, negative .3, but once you move beyond negative .3, there is some sensitivity.

Q. Okay. The range would be negative .1 to negative --

A. I wouldn't want to be quoted on it. You asked me my opinion. If -- I would feel more comfortable if you were to use the word "highly," negative .1, negative .2, at the most.

Q. Okay. And this is your word "highly inelastic."

A. I know.

Q. I'm just asking you what the range would be that would fall into highly inelastic. And as I understood your testimony, you said the range would be negative .1 to negative .3; is that right?

A. I would correct that.

Q. Okay. What would it be?

A. At most, negative .2. And that's just personal experience.

Q. Okay. So zero to negative .2?

A. Seems reasonable.
Q. Okay.
A. In other words, just as I said in words, "not much sensitivity" -- that's the next sentence -- "concerning quantities purchased with respect to price changes."
Q. Okay. And then you go on to say, "As such, studies based on the estimated fluid milk sales data provided by the USDA, AMS should result in lower own-price elasticities than studies based on the sales reported at various retail outlets."
Are you comparing the differences that would result when you look at the USDA reported data as compared to the IRI data?
A. I'm inferring that.
Q. Okay.
A. Because a lot of the previous studies that use the USDA and AMS data, because they are dispositional data, they go to various outlets, but they also go to the outlets that you just listed. And I'm supposing that if there isn't much sensitivity there, then it isn't, to me, surprising that studies that rely on the USDA AMS data result in lower own-price elasticities than studies that would be represented at the retail outlet, particularly on a weekly basis.
Q. Do you ever use the USDA data in your --
A. I have.
Q. -- in your elasticity analysis?
A. I have.

Q. -- and when you don't have somebody buying your IRI data for you, is that the data you use?

A. That's not the reason I use the data.

Q. Why is it that you use the USDA data?

A. Depends on the question that is being posed.

Q. What question needs to be posed to you for you to use the USDA data?

A. Well, since 2011 I have been the recipient of a USDA AMS contract to look at evaluating the effectiveness of the national dairy programs. The question there is, what is the impact of the advertising and -- advertising and promotion programs on the dairy industry? The data that we use in that, because the advertising and promotion expenditure data are on a quarterly basis, is a quarterly timeframe. And those data go all the way back on a quarterly basis, sequentially updated every four quarters every year, with a report to Congress. They go all the way back to 1995.

Well, in 1995, no health-enhanced milk. 1995, maybe very little, if any, lactose-free milk or organic milk. Even if I wanted to break down the data, that would not be available back to 1995. And even if I wanted to, and even if it were available, Circana -- neither Circana nor Nielsen would be able to provide data all the way back to 1995.

And probably, most importantly, the own-price elasticity was not the main course in that analysis. Remember, the question I was being asked is: What is the

impact of advertising and promotion?

Now, in formulating demand functions, and in that methodology, I didn't use demand systems. We only focused on fluid milk. Why? Because the advertising and promotion data weren't broken down to how much was expended on traditional white milk, traditional flavored milk, organic milk. They just had available the data on the aggregate category of milk. So there was no need to take into account interdependency. That wasn't the feature of doing that analysis anyway. That's why I said it depended on the question being asked.

So it was quite reasonable to come up with single-equation demand functions using the data, the estimated fluid sales data, great dataset, from AMS and USDA to address that particular question.

So we aggregated up from their monthly data to a quarterly data, and our model, single-equation model, had price in it, yes, but for the aggregate fluid milk category, controlling for other factors, income. We used the CPI for non-alcoholic beverages. There was seasonality because we had quarterly data, just as there was seasonality in my Barten Demand Systems Model. That was in the fine print, but we adjusted for seasonality as well.

But again, the feature was, well, what is the impact on advertising and promotion? There we were concerned about elasticities, but the elasticity was pertaining to the advertising and promotion dollars.

So for every 1% change in advertising and promotion dollar spent by DMI, MilkPEP, or qualified programs, the three entities that make up the $400 million advertising and promotion budget for milk, you know, what is the impact in terms of fluid milk?

We also did cheese. We also did butter. We also did all dairy products. And we also did exports.

So -- but the question that was being addressed is the impact on advertising and promotion. The question was: What is the appropriate own-price elasticity?

We had to be functional, because if you have demand functions and you don't have the measure of price, you have no demand function. It wouldn't stand up to scrutiny.

And by the way, that work, these annual reports to Congress are peer-reviewed, so they have all stood up to peer-review. And the last one we even had to put in adjustments for the pandemic. And we -- and those reports are submitted each year and should be publicly available.

But I contract with AMS. I send them the reports. They -- they engage in a peer-review. And after that, I'm just supposing I look for them from time to time to see if they are up on the website.

Sorry about being longwinded, but I just wanted to illustrate. Depends on the question being asked. Here the question is, well, what is the appropriate own-price elasticity for fluid milk? Different question.

Q. So when -- there's a few things in there. I just

want to understand it a little bit better.

So as I am -- I started there by asking you what question was posed to you in order for you to consider the USDA data. And you said when you were doing your evaluations for U.S. Dairy Programs that you do for Congress each year; is that right?

A. Yes.

Q. And that is a peer-reviewed process?

A. Yes.

Q. Who peer-reviews that for you?

A. Members of AMS.

Q. Anyone --

A. Economists.

Q. Anyone else other than AMS that peer-review that for you?

A. Not to my knowledge. But in the past, we weren't able to publish the results due to a contract, but now for this year, we have that capability. So going forward, in addition to trying to publish my analysis based on own-price elasticity, we're going to try to publish that in an academic journal that will get outside peer-reviewed, that is outside AMS and USDA. But once again, I -- I stand on the basis of my work.

Q. Okay. So -- but everything that you have already done for purposes of evaluating the U.S. Dairy Programs has only been peer-reviewed by AMS?

A. Yes, to my knowledge.

Q. And then going forward --

A. I mean, they may have had others peer-review it. And I know in the past when Dr. Kaiser did that, I was asked to peer-review his work. He may have been asked to peer-review my work, but I have no knowledge of that.

Q. How long have you been publishing the U.S. Dairy Programs evaluation?

A. Since 2011.

Q. And is that an annual publication?

A. Annual.

Q. And when is the last one that you published?

A. The last one was handed over and finalized in August of 2023, using data from 1995 to 2021.

Q. And is that only using USDA's data?

A. Well, the -- the basis for fluid milk, yes. But in general, true, because we looked at the USDA disappearance data for cheese, butter, and all dairy that are regularly put out by the Economic Research Service and AMS.

Q. And when you do your own-price elasticity evaluation for the U.S. Dairy Programs, are you evaluating -- are you evaluating the percentage of change in the quantity demanded that would be reflective of a 1% change in the price of a product?

A. We have many elasticities that we generated with our single-equation models. Own-price elasticity is one. Income elasticity is another. But the most important ones are the promotion and expenditure elasticities.

Q. What I'm trying to figure out is, is part of your

publication that you do annually for evaluating the U.S. Dairy Programs, are you conducting a fluid milk own-price elasticity analysis that measures what you're measuring here today?

A. I'm not conducting an own-price elasticity analysis. I'm conducting an investigation of the impacts of advertising and promotion on fluid milk, cheese, butter. But in the course of doing so, using the AMS data, I do report, in the Congressional report to Congress, and we also are required to provide a technical report, I report the own-price elasticities and the income elasticity, but that's not the feature item of that analysis.

Q. Understood.

It's just a component as part of your overall analysis that you perform when you are evaluating the programs?

A. Yes.

Q. Okay. And, in fact, Dr. Kaiser, and his exhibit is 115, he cited to numerous studies that he relied on to evaluate his price elasticity, and he was careful to say it only peer-reviewed articles.

Did you read his testimony?

A. Yes.

Q. And did you look at the peer-review articles that he cited in support of his elasticity findings?

A. Yes. There were 38 of them, but most of them I was already familiar with.

Q. Yes. And one of them was yours; is that right?
A. I'm very familiar with that.
Q. And that was the -- it said 2022, and it cited as the Chapter 3 of the USDA Report to Congress on the National Dairy Promotion and Research Program and the National Fluid Milk Processor Promotion Program, it's for USDA, Washington, D.C., 2022.
Is that the one that you are referring to that you are very familiar with?
A. Yes.
Q. And is that one of the evaluations that you performed for USDA's Dairy Program?
A. Yes.
Q. And that one was published in 2022?
A. Yes, if it's the most recent one. I don't know, I thought Dr. Kaiser cited the one before the most recent one.
Q. So Dr. Kaiser started -- cited the one in 2022, and then you told me just now that you published another one in September of '23?
A. I know it's confusing, but the -- you are right. The one that is cited in 2022 uses, you know, not the most recent dataset. So as I said, each one of these Congressional reports are updated sequentially with four new quarterly observations.
Q. And your -- your 2022 report that was -- that's cited by Dr. Kaiser, concluded that the price elasticity for fluid milk was negative .071; is that right?

A. I believe that's accurate, but I would have to look at it. But it was inelastic, yes.

Q. And you told me you were very familiar with it, but you recall at least that it was inelastic in the 2022 publication; is that right?

A. Yes.

Q. Okay. And then in your most recent publication in 2023, what did you conclude was the elasticity of fluid milk?

A. Essentially in the same neighborhood.

Q. Did you -- is it actually less than that by half?

A. By half, yes.

Q. So it's actually negative .038; is that right?

A. Yes.

Q. Okay.

MS. HANCOCK: Let's go ahead and mark it just so we can get it in. I think the 2022 has already been taken judicial notice of earlier, so I'm not going to mark that.

THE COURT: Ms. Hancock, I would like to take a break. What would you like, five minutes, ten minutes, or 15?

MS. HANCOCK: Whatever you prefer, Your Honor.

(Court Reporter clarification.)

THE COURT: 15 would be great. Please be back ready to go at 3:55. We'll go off record at 3:40.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record.

We're back on record at 3:55.

Ms. Hancock, you were marking an exhibit when I interrupted. What should we do next?

MS. HANCOCK: We should mark the exhibit.

THE COURT: All right. It will be 392.

MS. HANCOCK: Thank you.

THE COURT: And what number does it have besides 392?

MS. HANCOCK: Your Honor, this is not a National Milk exhibit. This is the U.S. Department of Agriculture Report to Congress, and so I don't have a National Milk exhibit number on it.

THE COURT: All right. No need.

(Thereafter, Exhibit Number 392 was marked for identification.)

THE COURT: Very good. Now, does everyone have one? All right. Good.

So, Ms. Hancock, would you just hold that up so that the people who are watching online can see what we have just marked.

All right. Ms. Hancock, you may proceed.

MS. HANCOCK: Thank you.

BY MS. HANCOCK:

Q. Dr. Capps, is Exhibit 392 the document that you were referring to when you said that you have a peer-reviewed quarterly evaluation of the U.S. Dairy Programs that you published in September of 2023?

A. Well, the content is similar. I think the date September 2023, that didn't come from me. And even

allowing for that, the most recent report to Congress has quarterly data from 1995 to 2021.

But to answer your question, this one was peer-reviewed. I don't know where the "September 2023" date came from. It didn't come from me.

Q. Okay. So other than the notation at the bottom that says "September 2023," did the other parts of this come from you?

A. Not -- not the entire report.

Q. Okay. Let's turn to page 13, where Chapter 3 begins.

A. Yes.

Q. Did you author Chapter 3 of this report in Exhibit 392?

A. Just give me a moment to look through it. Okay.

THE COURT: Let's go off record while we all take a look at this. This is data-packed.

(An off-the-record discussion took place.)

THE COURT: Let's go back on record.

We're back on record at 3:59.

Dr. Capps, you were saying?

THE WITNESS: It is a summary of the 2020 quantitative evaluation of the effectiveness of the dairy and fluid milk promotion programs. But, once again, it's not the most recent.

BY MS. HANCOCK:

Q. Meaning not the most recent because this goes through 2020?

A. The data run through 2020. The most recent is 2021.

Q. Okay. This is the most recently published version of this document; is that correct?

A. Well, I don't know. It depends on who published it. But I'm telling you it's not the most recent report that I handed over to AMS.

Q. Okay. Are you aware of whether there has been anything more recently published after what we have marked in Exhibit 392?

A. Well, when I turn in my report to Congress, that's technically what Chapter 3 is, and there's an accompanying technical report that has all the details that Congress doesn't want to see, or probably most others, too. But those data run through 2021. I don't know who published this. Presumably AMS. But when I hand over the report, I'm under the presumption that ultimately it will be published.

Q. Okay.

A. So I don't know, because I didn't check recently, if the 2021 report or the most recent report has actually been published.

If that -- if this is the most recent one that has been published, I'll go with that. But I'll testify that Chapter 3 is my work.

Q. Okay. When you say Chapter 3, you mean Chapter 3 in Exhibit 392 is your work?

A. Yes.

Q. And when did you turn in the version that would go through 2021?

A. Turned it in April of this year, 2023. Then it went through a peer-review process and was signed off on after responding to comments made by AMS USDA in August of 2023. And that's with data running through 2021.

Q. Okay. So before we get there, I want to first look at this one, and then we'll talk about the one that goes through 2021; is that fair?

A. Do you have that report?

Q. I don't have it, but I'm guessing you know enough about it we can talk about it.

A. Okay.

Q. Okay. So in this Chapter 3, you're providing an overall analysis and evaluation of the U.S. Dairy Programs effectiveness for helping to support the fluid milk industry; is that right?

A. Yes.

Q. And --

A. And if I could add one more point, I'm sorry to interrupt. This is my work, but also Scott Brown of the University of Missouri was a partner with me, especially in running simulations that are also reported in Congress. So I just wanted to state that for the record.

Q. He will appreciate that. Thank you.

A. He's a good guy.

THE COURT: How is Brown spelled?

THE WITNESS: B-R-O-W-N.

THE COURT: Thank you.

BY MS. HANCOCK:

Q. And I just want to jump to the page 31 in your Table 3 -- or 3-3, and this is the table that you use where you include as part of the factors for consideration in your evaluation, the own-price elasticity for the dairy demand of fluid milk; is that right?

A. Just to be sure, we're talking about Table 3-3?

Q. Yes.

A. On page 31?

Q. On page 31.

A. Well, what is reported are not just the own-price elasticity, but as I explained before break, the income elasticity, but the most important element for this analysis was the promotion elasticities.

Q. Right. I understand that you're also doing promotional elasticities for purposes of this report.

My question was: Included in this table also is your own-price elasticity of fluid milk that takes -- from 1995 up to 2020; is that right?

A. Yes.

Q. And as of 2020, for purposes of this published report that was published in September of 2023, you concluded fluid milk's own-price elasticity is negative 0.038?

A. Yes.

Q. And that would mean that that's inelastic by your measure; is that right?

A. Yes.
Q. And would you consider that to be highly in- -- highly inelastic?
A. Yes.
Q. And you said that you had a report that you had generated for 2021 activities. What was the own-price elasticity for fluid milk in the report that went through 2021?
MR. HILL: Your Honor, this is Brian Hill. We're going to object to this.
THE COURT: You are going to object to this line of questioning?
MR. HILL: That is correct.
THE COURT: Oh, on what basis?
MR. HILL: Well, this is -- I'm assuming this is contracted on our behalf, on the USDA's behalf. We have chosen not to publish it at this point, and we don't think this line of questioning should proceed.
MS. TAYLOR: Just on the 2021.
MR. HILL: Just on the 2021.
THE COURT: Oh. So what I have got in front of me is okay?
MR. HILL: Correct.
THE COURT: Understood. All right.
So I -- I'm going to honor the objection.
MS. HANCOCK: It's super awkward for me, so I will, too.
THE COURT: All right.

THE WITNESS: Could I add something, though?

MS. HANCOCK: I don't think so.

THE WITNESS: Okay. Not about the newest report.

But you have to understand, there's a -- the reports to Congress have been going on for a long, long time. Prior to 2011, when I initially got the contract from AMS, the previous ten years the analyses were conducted by Dr. Harry Kaiser.

And in putting together those reports, including mine, there was agreement on what the structural composition of the econometric model would be, given the quarterly data, meaning we would agree on what the explanatory factors were; own-price being one, seasonality being another, income, ages of preschool, preadolescent, and adolescent, or the percentages of the population that fell into those categories; the percentage of foods eaten away from home. I could go on and on.

In other words, the structure of the model didn't change. And, again, even if I wanted to change it, there was inertia there.

But as I testified before break, we couldn't change that anyway because with the data that we have, particularly with the emphasis on advertising and promotion expenditures being quarterly, and the lack of data that we currently see in a retail marketplace on a quarterly basis going back to 1995.

So, you know, there's a bit of inertia, you know, we're locked into a structural change -- I mean, a

structural composition of the econometric model. I'm not unhappy with that, but at the same time, I just wanted to emphasize there wasn't a whole lot of flexibility.

We had it in the most recent report, variables concerning the pandemic. Other than that, the model structure hadn't changed since 2011. And the actual estimated parameters change a little bit, but we didn't see that noted structural change that we saw during the pandemic during my analysis, even over that period back to 2011. In other words, the model was fairly robust: Large explanatory power; all coefficients being significant; most important, the advertising and promotion expenditures, elasticities being positive and statistically different, meaning the National Dairy Programs, despite the fact that per capita consumption of fluid milk, for example, had been declining, was -- was positive.

And when asked about that, you know, I view it like a rock coming down the hill, you didn't completely stop the rock, but you slowed it with advertising and promotion expenditures. That would be the takeaway.

But we were -- the major point I'm trying to make is that the structural econometric model is the same --

THE COURT: Stay close to the mic.

THE WITNESS: The structural integrity of the model was the same across all of those years, even before I had the project in 2011.

BY MS. HANCOCK:

Q. When you say the "structural integrity" of the project, you mean the structural integrity of the process you go through in order to generate this Chapter 3 each year from 2011 to the present?

A. Especially for fluid milk.

THE COURT: Is the answer yes?

THE WITNESS: Yes.

THE COURT: And now you may say especially.

THE WITNESS: Especially for fluid milk. For some of the other dairy products there are other things going on. But fluid milk, you know, if you are -- since we're emphasizing that, I want to make the point, that structural model specification -- and what I mean by that, the list of explanatory variables that are used -- very much the same year after year.

BY MS. HANCOCK:

Q. And when you turn in your Chapter 3 each year, and it's been, what, over 12 years now, when you turn this in each year, you are intending for the information that you provide to the USDA to be accurate; is that right?

A. Well, of course. You know, I stand behind it, the data.

Q. And you've said that there's some inertia. I just want to make sure we're clear on this.

You are not saying that anything you have included in here is inaccurate or incomplete, are you?

A. All I'm saying is, especially for milk, the structural -- the model specification --

THE COURT: Just a minute. Stop. First thing to decide is whether to say to Ms. Hancock, "correct," if that's true, and then you may explain.

THE WITNESS: Essentially you are correct, but I want to say that the model specification for fluid milk especially, pretty robust year after year since I had the project for 2011, but even before that, based on the work of Dr. Kaiser.

BY MS. HANCOCK:

Q. And if -- if this information that you were using to include in this report needed to be updated or the methodology changed, would you make that recommendation to USDA?

A. Well, year after year, in fact, prior to coming here, I received some updated information from Jill Hoover for the next evaluation. So, yes. As a starting point, I'll start with the structural specifications we have had in the past.

But you have to be careful. Even though we have been fortunate there hasn't been much structural change, there's no guarantee that will continue going into the future. So there's a lot of diagnostics that we use and applied econometrics to make sure that's the case. And any work that I would do, you know, I would always imagine it would be -- I would desire it to be peer-reviewed, and in these cases they have been.

Q. And have you ever made a recommendation to USDA that they allow you to change your methodology that you

used to conduct the own-price elasticities for fluid milk?

A. Well, when Dr. Kaiser did the analysis, when it came to the -- the econometrics part was very similar.

But this report in Chapter 3 also deals with a simulation model, and I'm -- and I don't want to be too technical here, but these are demand functions at the retail level, or demand functions for exports. I feed this information to Scott Brown who has an encompassing model called the AMAP Dairy Sector Model, that goes from producers, dairy producers, all the way to consumers. And so ultimately, not only do we want to measure these elasticities, we would like to put together a return on investment for USDA.

So for every dollar coming from DMI, MilkPEP, or qualified programs, how much are you getting in return? In order to do that, you need an all-encompassing model that takes into account supply shifts, demand shifts, and ultimately gives you impacts on prices received by dairy farmers, prices received at Class I, Class II, Class III, I think we had a Class IV, wholesale prices for butter and cheese, per capita consumption for fluid milk, cheese, dairy, and nonfat dry milk. A host of things, they are all listed here. That part of the report to Congress, completely different from the methodology used by Dr. Kaiser.

Q. Yeah. My question is just with respect to the own-price elasticity that you have reported on page 31 of Exhibit 392, have you ever made a recommendation to USDA

that you be allowed to change your methodology used to -- used to report the own-price elasticity in this report?

A. The only change I made this latest time is that now we have data, because I went through 2021, where we could talk about an additional explanatory variable, that being affiliated with pandemic.

Q. And the USDA is not wanting us to talk about that one, so I want to focus about what we have in front of us, which is Exhibit 392.

Up through when you reported Exhibit 392, did you ever ask to change the methodology that you used to determine the own-price elasticity for fluid milk?

A. No.

Q. And do you believe, as you sit here today, that the own-price elasticity that you have reported in Exhibit 392 is accurate?

A. Again, yes. But in the context of a principal question to be answered was the impact of advertising and promotion. The main course was not about own-price elasticity or income elasticity.

Q. So does the answer -- or does your evaluation and conclusion about the own-price elasticity change depending on who your audience is?

A. No. Depends on the question being asked and the data being used.

Q. And the promotional elasticities are reported in the prior two columns on page 31; is that correct?

A. Yes. For the whole period 1995 to 2020, because I

allowed the promotion elasticity based on my model specification to change from year to year. So we were able to compute averages of those elasticities, and then since the last year associated with this report was 2020, what the promotion elasticity was for 2020, the average-of those four quarters.

Q. And so you reported that the promotional elasticity for fluid milk from 1995 to 2020 is .055; is that right?

A. That is correct, meaning a 1% change in promotion dollars associated with fluid milk advertising and promotion would lead to a .055% change in the quantity of fluid milk.

Q. Okay. And then for 2020, you have a promotional elasticity of .040; is that correct -- for fluid milk; is that correct?

A. Yes.

Q. Okay. And then for own-price elasticity, that is a standalone measure, is it? Is that correct?

A. Yes.

Q. And that one, as we have talked about, is negative .038?

A. Yes. And in my model specification I didn't allow the own-price elasticity or the income elasticity to change over the time period.

Q. And that's because it's reported for the entire time period between 1995 and 2020; is that correct?

A. Yes.

Q. Does that go to the end of the calendar year 2020?
A. It's quarterly periods, so through the end of the calendar year.
Q. Okay.
A. So the data runs from the first quarter of 1995 to the fourth quarter of 2020.
Q. If we look back at Exhibit 387, that's your PowerPoint presentation on page 12, your pre-COVID period that you selected in your testimony was January 8th of 2017 to March 15th of 2020; is that correct?
A. Yes.
Q. Okay. And so when you looked at the total fluid milk here for that period, you have 1.10 elasticity; is that right?
A. Yes.
Q. And that's different than what you have reported in Exhibit 392 for a different time period; is that correct?
A. Yes.
Q. And is that difference explained by the fact that you have selected a different time period to evaluate?
A. Not alone.
Q. Is it also explained by the fact that you used a data source set from IRI instead of the USDA data?
A. That's part of it, but also the frequency is different. The frequency, as I have testified on the report to Congress quarterly, the frequency here, weekly.
But there's also one added dimension. In the

report to Congress, there was no prices of juices, bottled waters, sports drinks, protein beverages, plant-based milk alternatives, or refrigerated yogurt. So the addition, if you're trying to explain the difference, the addition is, well, we have a different frequency, the main focus is on own-price elasticity, and we have a detailed list of -- a list of additional products that affect the demand for either total milk or even the five milk segments done on a weekly basis.

But to answer your question, the timeframe is also different.

Q. Okay.

MS. HANCOCK: Let's go ahead and mark our next exhibit. I believe it's 393.

THE COURT: Correct. And what does it look like?

MS. HANCOCK: December 14, 2022, PowerPoint presentation, "What's Going on With Milk?"

THE COURT: All right. It looks like this (indicating), Ms. Hancock?

MS. HANCOCK: Yes.

THE COURT: Would you hold it up for the viewing audience? Except you have got your sticky note on it. Don't want to give your trade secrets away.

Thank you. All right. So this one is 393.

(Thereafter, Exhibit Number 393 was marked for identification.)

BY MS. HANCOCK:

Q. Dr. Capps, are you the author of the presentation

that we have identified as Exhibit 393?

A. I'm one of the authors.

Q. Okay. If you go on the third page, there's three of you there.

Are those the other two authors of this presentation?

A. The -- Doug Adams was a -- an intermediary between Dr. Ishdorj and I and IDFA. But the authors are Dr. Ishdorj, who I mentioned before, and myself.

Q. And when you said that you were initially hired along with Dr. Ishdorj, is this presentation part of what you were initially hired to do for IDFA?

A. Yes.

Q. So this is some of the preliminary work that you did in order to do the elasticity analysis for IDFA?

A. Yes.

Q. And if we turn to page 4, you initially did your work using both the USDA -- I'm sorry, let's -- it's page 2. I apologize.

A. Page 2?

Q. Yeah. If we can look at the specific objectives.

A. Uh-huh.

Q. I think you had testified earlier that it's important to first identify what the question is that you are asked to do?

A. Yes.

Q. Is that what you have identified here, the items that you and Dr. Ishdorj were asked to perform for IDFA?

A. Yes.
Q. And one of them was to estimate own-price elasticities for milk for the 11 Federal Milk Marketing Orders using the USDA's data.
Is that what number one is referring to?
A. Yes.
Q. And then the next one in number 2, estimate the own-price, cross-price, total expenditure, and income elasticity using the IRI; is that correct?
A. Yes.
Q. And then number 3, to provide detailed literature of the demand for fluid milk and milk-related products; is that correct?
A. Yes.
Q. And did you perform all three of those objections -- objectives for IDFA?
A. Our team did.
Q. Okay. The "team," meaning you and Dr. Ishdorj?
A. Yes.
Q. And your testimony that you have provided today that is in Exhibit 387 for the PowerPoint presentation, and your testimony which is Exhibit 386, is that the culmination of the work as you have done for IDFA?
A. Yes. And this -- to add a clarification, in -- I forgot the number now for the new PowerPoint that I received?
Q. 393.
A. Okay. In 393, when I used the IRI data, I used

the same commodities, but we didn't have a moving-past-COVID period.

Q. Okay. And I didn't see that you had used the USDA data in your recent PowerPoint presentation that we have been talking about today.

Did you include any of that initial work that you did analyzing the USDA data in your elasticity analysis?

A. No.

Q. Why not?

A. Well, as I stated in my testimony with my PowerPoint, to get a clear picture of what's happening at the retail sector, you need a breakdown of the fluid milk categories. And we don't need to go through those, I think you know them now. Also, the alternative beverages and yogurt. But the AMS USDA data includes information on total milk and organic milk only, and because of that limitation, I think, and also the difference in frequency, and the consumer driving things, I think a better picture of the own-price elasticity, just concentrating on that, is based on the testimony from my PowerPoint, Exhibit 386.

Q. And that only relies on the IRI data?

A. Yes.

Q. Did you leave out the USDA data results because they showed that fluid milk was inelastic?

A. No. In the contract with IDFA, the question that was begged, as I testified earlier, what happens after we move past COVID? And that was the question that needed to be addressed. And so the focus was going back to the IRI

data and adding the weekly data from May 22 of 2022 to August 13 of 2023.

Q. Did you present Exhibit 393 to IDFA?

A. Everything in the report that Dr. Ishdorj and I did was delivered to IDFA.

Q. I'm specifically talking about Exhibit 393. It looks like it's a PowerPoint to me. I'm just wondering, is this a presentation that you gave to IDFA?

A. You are talking about this document (indicating).

Q. Yes, "What's Going on With Milk?"

A. Yes, the PowerPoint presentation was made via Zoom, a number of people, and also a written report was delivered to IDFA.

Q. A written report that's different than the one that we have today; is that right?

A. The -- yes. Because this report here only focuses on the IRI data with the added weeks that I just mentioned.

Q. Let's turn to page 4. This is Exhibit 393. This is your December presentation to IDFA.

Do you know who attended that presentation?

A. I couldn't tell you.

Q. Do you know how many people were on the Zoom?

A. There were more than I expected.

Q. Is that more than 20?

A. I have no idea. I didn't count. I was so concentrated on making the presentation, I really don't know.

Q. Okay. And then on this page 4 you state, "The primary motivation for the consideration of the USDA AMS data is to draw comparisons to the IRI analysis and to shed light on the non-retail components of fluid milk sales."

Was that an accurate statement when you made it?

A. Nothing has changed. It was accurate. It is accurate.

Q. And the USDA data would provide insight into the non-retail component of fluid milk sales; is that correct?

A. Yes. And as I testified when we were talking about coverage of the retail data, we said -- I stated that roughly 76% of the retail -- retail marketplace was captured by IRI, but in the USDA data you have all these other places, schools, for example, foodservice industry, everything that I mentioned before.

Q. And if I understood how the math works here, that with elasticity, one of the benefits is that it's not a weighted average and it's not dependent on volumes; is that correct?

A. Well, elasticity is a unitless measure, but in order to calculate it, you need volume, you need prices, et cetera.

Q. But is it fair to say, then, that you could combine two data sets, such as the IRI and USDA's elasticity results, and one would not dilute the other?

A. Incorrect.

Q. If --

A. You cannot combine them.
Q. Okay.
A. Totally different set of entities.
Q. So would you have to measure them separately to be able to look at the retail versus non-retail?
A. Well, the USDA data is not exclusively non-retail. They just happen to include foodservice, schools, et cetera, that retail doesn't. And the reason you can't combine them, you know, as I have stated already, in the IRI data, the set of additional factors that you bring in to the analysis, you are able to do so, but you cannot with the USDA data.

So, in fact, another reason for drawing these comparisons is to determine why you get such differences, and I think I have explained that.

Q. And the USDA data would include both retail and non-retail because it's just the total fluid milk that is reported to the USDA?
A. Yeah. That -- as I state here, they correspond to deliveries or dispositions of fluid and milk products, you know, from milk processing bottling plants to various outlets in Federal Milk Marketing Orders, 11 of them.
Q. And the USDA has its data available for post-COVID as well; is that right?
A. Oh, yes.
Q. I didn't hear what you said. What was the first word you said?
A. Oh, yes.

Q. "Oh, yes." Okay.
A. But only -- but only for milk and perhaps organic milk, maybe a little flavored milk. But for the national level, you can get a more detailed breakdown, but not so at a regional level.
Q. Okay. And then if we just turn to page 9 -- no, let's go right to page 10. I apologize.
Your December of 2022 report to the IDFA members reported that the own-price elasticity using the USDA data was negative .24; is that right?
A. Yes.
Q. And that would be highly inelastic; is that correct?
A. It would be inelastic.
Q. Well, I thought you just told me that negative .038 would be -- oh, I guess because of the zero. Never mind. I answered my own question.
So this would -- the total milk elasticity that you have reported to IDFA members in December of 2022 was that it would be inelastic; is that correct?
A. On page 10?
Q. Correct.
A. Total milk, negative .24, yes.
Q. What's the time period that you were evaluating here?
A. 2017 to -- January of 2017 to August of 2022.
THE COURT: I'm sorry, I'm lost. So I found the right numbers on page 10, but they are about bottled

water. So which paragraph is the milk in?

MS. HANCOCK: Page 10 in Exhibit 293 -- or 393.

THE COURT: Oh, wrong exhibit. Got it. Thank you.

MS. HANCOCK: I was concerned because I didn't see water.

THE COURT: Okay. Thanks.

BY MS. HANCOCK:

Q. Okay. So just to be clear, you concluded that the time period from 2017 to August of 2022, using the USDA's data, that total milk was inelastic at negative .24?

A. Based on the use of the month, yes, based on the use of the monthly USDA data from AMS.

Q. Okay. And if we turn to the next page on page 11, you broke it down by region as well; is that correct?

A. Yes.

Q. By each of the orders?

A. Yes.

Q. And for every single one of those orders, it's true that using the USDA data, that total milk is inelastic?

A. Yes.

Q. And then the next section of your presentation goes into the IRI analysis; is that right?

A. Yes.

Q. The -- and if we go to page 15, this is where you reported elasticity using only the IRI data; is that right?

A. Yes.
Q. And you have a pre-COVID period and a COVID-affected period?
A. But no moving-past-COVID period.
Q. Yeah. You hadn't yet conducted the third analysis; is that right?
A. Right.
Q. So -- but this was your initial report as of December of 2022, and so here you only have the two time periods; is that right?
A. Yes.
Q. And so you have concluded that using just the IRI data, it's 1 -- negative 1.10 for total milk, which is what you reported today; is that right?
A. Yes.
Q. And that is what you said what made it elastic, correct?
A. Yes.
Q. And then for the COVID period here, you had negative .40 showing that it had become inelastic for total fluid milk.
A. Yes.
Q. And then, if we move forward to the end of the your presentation, you have a meta-analysis on page 20.
Do you see that?
A. Yes.
Q. What is a meta- -- systematic review and meta-analysis?

A. A meta-analysis takes a look at entities like own-price elasticities that are reported across studies, and they are put together in a separate statistical analysis. That work was done by Dr. Ishdorj.

Q. Okay. And does that just combine the USDA elasticity and the IRI elasticity information?

A. Well, as -- no. What -- no, it doesn't. As it's stated on page 20, these elasticities come from 37 existing reporting studies of own-price elasticities for milk, not counting the IRI data, not counting the AMS own-price elasticities.

Q. Okay. And so then you took those 37, and you create -- you analyze all of those together to create a consolidated dataset to see what the effect is; is that right?

A. That's correct.

Q. And so you have here, from those 37 existing studies that were reported, the own-price elasticity for milk ranged from negative 2.41, zero.

Can you explain what that measure there shows for that range?

A. Exactly what it states. The range of elasticities was bounded below by negative .241 and bounded above by zero.

Q. And then the median value of all of those combined was negative .236?

A. Yes. There were 37 studies, but there were 66 elasticities. So you have a list of the elasticities; the

median is the 50th percentile.

Q. And so using all 37 of those studies and the 66 elasticities, you concluded that the median value was negative .236; is that correct?

A. Yes.

Q. And that would be inelastic?

A. Yes.

Q. And then you go on to say, "The overall white milk elasticity from meta-analysis of the data from 18 existing studies was estimated to be negative .37."

Is that correct?

A. Yes.

Q. And then what follows there is the calculation of how you reached that negative .37?

A. No, it's a confidence interval, 95% confidence interval.

Q. Okay.

A. If -- in other words, what we would attach is with 95% confidence, the own-price elasticity for white milk would range from negative .15 to negative .59.

Q. Okay.

A. Again, based only on these 37 studies, not based on my work.

Q. Okay. Understood.

So what you are concluding at the end of your presentation in December of 2022 to IDFA, is that with 95% certainty, fluid milk price is inelastic in that range between negative .59 and negative .15?

A. Yes. 95% confidence zone.
Q. Yeah. 5% chance you are wrong, 95% chance you are right. That's what you were telling IDFA; is that right?
A. If we were able to repeat this for 18 other existing studies with 95% confidence, we'd expect that range to be between negative .15 and negative .59.
Q. And so no matter what your confidence level within that range, that entire range means that fluid milk prices are inelastic; is that right?
A. That's the conclusion that was reached.
One other point to make on that. We also state these elasticities were all pre-COVID. And as I stated in my own testimony, those pre-COVID studies from which these are coming do not capture what is currently occurring to consumers in the retail marketplace. I hate to be repetitive, but that's important.
And the other point that we make here, if you look at flavored milk, they are elastic even with these 37 existing studies, and for organic, the range is even wider from negative .63 to negative 4.22.
MS. HANCOCK: We're going to mark another exhibit really quick.
THE COURT: So now this one is -- so we have marked 393, so this new one will be 394. What does it look like?
MS. HANCOCK: It has a blue page on the front, and it's is titled "A Deeper Look at Milk and Competing Beverage Price Elasticities."

THE COURT: Thank you. So that's been marked 394.
(Thereafter, Exhibit Number 394 was marked for identification.)
BY MS. HANCOCK:
Q. Dr. Capps, Exhibit 394, is this the report that you and Dr. Ishdorj prepared for IDFA on or around March 23rd of 2023?
A. Yes.
Q. And does this follow the presentation that we looked at in Exhibit 393?
A. Yes.
Q. If we look at the third page in, Roman Numeral iii, or Romanette, I guess, Roman Numeral iii, this is where you have a Table ES1 that captures the price elasticity findings of you and Dr. Ishdorj as of March 23rd of 2023?
A. Yes.
Q. And here you have a total milk that you have reported as negative 1.097 for pre-COVID time period?
A. Yes.
Q. And is this based on the IRI data?
A. Yes.
Q. And does it take into account at all any of the USDA data?
A. No USDA data was involved.
Q. Okay. In this report that you and Dr. Ishdorj generated for IDFA in Exhibit 394, do you anywhere in here utilize any of the USDA data?

A. I believe we did toward the end.
Q. If you look at page 48.
A. Actually earlier than that. If you look at page 42 where it starts, "Analysis of the USDA data from the AMS."
Q. That's where that section starts, and then the summary chart is on page 48; is that right?
A. I know you are right.
Yes.
Q. And, again, using that USDA data, your own-price elasticity concludes that total milk is inelastic?
A. Yes.
Q. And that's that negative .2372?
A. Yes.
Q. And that's even including the seasonality monthly breakdown that you have in that table?
A. Yes. The list of explanatory factors are listed in Table 39.
Q. And that is reported for the period between January of 2017 and March of 2022?
A. I thought it was August. Well, no, you are right, March 2022.
Q. I'm just reading that off the legend on the bottom.
A. It's right, March 2022.
Q. Okay.
A. But notice, though, in this table what's missing. All the other, you know, actors that we have identified as

significant statistically influencers of the demand, not only for total milk, but organic milk, traditional white milk, and traditional flavored milk.

Q. You mean the non-dairy products; is that what you mean?

A. Yes.

Q. Okay. And at least for purposes of this March of 2023 report, you were still including this information to IDFA; is that right?

A. I didn't understand the question, I'm sorry.

Q. Yeah. Even up until March of 2023 you were still including this own-price elasticity in Table 39 on page 48 to the IDFA?

A. Well, this whole report was sent to IDFA.

Q. And this table you prepared knowing that it didn't include those non-dairy products; is that right?

A. Yes. Because we didn't have access to them.

Q. Okay. And it was some time thereafter that you obtained an additional report from the IRI that gave you access to that additional information?

A. Not concerning the USDA data, but the additional information concerning the moving-past-COVID period.

Q. Okay. And -- and then between then and when you generated your testimony that you provided today in presentation Exhibit 387, and your written statement in Exhibit 386, you dropped the "USDA" data from your report; is that right?

A. I didn't include it because, as I mentioned, the

main focus was on the own-price elasticity as what's happening in the current retail marketplace. The AMS data does not deal with that issue.

Q. Okay.

A. There's not enough of a breakdown, you know, to capture all five segments that I mentioned are important.

And by the way, I don't know if I, on record, mentioned this, but it's important to include those other alternative beverages and yogurt, because in the Barten Model, their coefficients associated with the prices of these are statistically different from zero, meaning they are just not some whim that based on the other studies, well, maybe we should throw them in there. We actually -- you know, as has been talked about, they are significant influencers of either total milk or the five milk segments that I have listed.

Q. And -- but the USDA data is good enough to report it in a peer-reviewed publication to Congress; is that right?

A. Well, I did report it. Yes, I did report it to Congress. But there, again, the issue was, what is the impact of the advertising and promotion programs.

Q. And when you were first hired by IDFA, you reported it to IDFA as well; is that right?

A. When I was first hired by IDFA, the next part of the question was?

Q. Yeah. You reported the elasticity using USDA's data showing that it was inelastic, fluid milk was

inelastic; is that right?

A. That was part of the initial contract between Dr. Ishdorj, I, and IDFA.

Q. And then when you did a subsequent follow-up publication in March of 2023 in Exhibit 394, you again used that USDA data to report on the elasticities of fluid milk; is that right?

A. No. The updated contract with IDFA was to add additional data concerning IRI or Circana only and the moving-past-COVID period.

Q. Until you had authored your most current testimony, are you aware of any time that you have ever previously concluded that fluid milk was elastic?

A. I would have to check my records. Most of the previous studies showed inelastic demands.

Q. Okay.

MS. HANCOCK: I have no further questions. Thank you for your time.

THE COURT: I need a bit of input from the group. We have 11 minutes before we stop for the day. How do you want to use it?

Let's get the Agricultural Marketing Service mic on.

MS. TAYLOR: I think AMS would just advocate we plan for tomorrow and start fresh at 8 o'clock.

THE COURT: Does anyone object to that?

No one does.

Dr. Capps, I'm going to leave you sitting right

there while we discuss tomorrow. I know you will be part of that discussion.

Ms. Hancock, how would you like to proceed tomorrow?

MS. HANCOCK: I don't want to lose sight of having the exhibits admitted that I had offered, so I'll just put an asterisk there. We can hold until tomorrow as well if you prefer.

MS. TAYLOR: If I could just add to that. We have had some network USDA issues, which is why they have not been on the web yet. We're working on that. We're going to post them under -- with some NMPF exhibit numbers, whatever is next on your list, I don't know what they are. But I'll have those numbers in the morning, and maybe we just pick up first thing, and that way we have all right numbers in the record.

MS. HANCOCK: Yeah. So then we'll just provide an update on what we're thinking for witnesses. We talked last night amongst our team to try and speed things up a little bit.

We are not going to put on Christian Edmiston and John Kang, so we're cutting two witnesses. I thought we would be a little bit further this week, and we're trying to get done.

So our lineup for tomorrow, after we finish Dr. Capps, is to proceed with Mike Herting, Monty Schilter, Brad Park, Steve Stout. We have Dr. Vitaliano, who we had remaining cross on, which may be very limited

at this point, but we would offer him up if we had any remaining room, which my team assures me is way too optimistic.

And I know several of you have asked about Dr. Scott Brown. He is -- we had originally thought we could get to him tomorrow, but we've had to jockey his schedule around. So we will plan on him testifying firmly on Wednesday, which might be well after we're done, so I'm just saying that out loud now in case there's other witnesses that MIG can plan for in between there. It's not really dependent on his testimony. And we told Jeff Sims if he went home, we would get him in on Monday. And then we still have Ed Gallagher.

And then that will conclude everyone that we have on Proposal 19. So we are anticipating being done by Monday.

THE COURT: Except for Scott Brown?

MS. HANCOCK: Yes, but he's -- yes. Correct.

MS. TAYLOR: And on my list I had a Carl Rasch. Is he not testifying as well?

MS. HANCOCK: We had cut him from a prior topic --

MS. TAYLOR: Okay.

MS. HANCOCK: -- for the same thing. He might come back as a rebuttal at some point, but not on any proponent topics. That's our full list.

THE COURT: Did anybody need any of those names repeated? Do you know who to anticipate? Okay.

Mr. English.

MR. ENGLISH: So the last four weeks we've had communications, bu I absolutely agree with National Milk they have the right, the need to get their testimony done.

We thought based upon that the Tuesday was not available, and so there were witnesses who were available Tuesday who were told to come in January. So we will do our best to see what we can do to try to fill slots.

I will say, and I just don't know how long, there is a dairy farmer who is planning on coming Wednesday. Dairy farmers, to my mind, still get priority.

THE COURT: Who is coming on Wednesday?

MR. ENGLISH: Wednesday. His name is Mike Sumners from Tennessee. He has been a witness at other proceedings.

THE COURT: And how do you spell his last name?

MR. ENGLISH: S-U-M-N-E-R-S.

I do not believe his testimony will be very long.

Again, I can tell you that we will do our best between IDFA and ourselves to see what we can do about Tuesday, but I note that there were communications about this issue, expressly about Tuesday, and we were told not to bring witnesses Tuesday, and so we told them not to come to Tuesday, and I can't promise you now that we can get them here Tuesday.

MS. HANCOCK: I would like to respond to that.

MR. ENGLISH: I'm not accusing you of anything.

THE COURT: Well, let me just ask Ms. Hancock: Of those people on your list for tomorrow, which is Friday,

who don't fit tomorrow, are any of them available on Tuesday?

MS. HANCOCK: They will probably come back for Monday. They have been all hanging out for weeks. I mean, we have never said don't have anybody ready for Tuesday. We just said, stop giving your people firm dates in front of our dates because we're having to balance all the schedules, and our folks are just sitting here for weeks at a time. We have really made a considerable effort having people sit here for full weeks, waiting to go on in case there's a gap.

THE COURT: Well, it's not like there was nothing to listen to.

MS. HANCOCK: Well, it's very expensive for these companies to have their employees sitting here, and then traveling back and forth because they have to leave for meetings. So it has been with considerable expense that our clients have had their employees here, oftentimes leaving and coming back. And we have managed our own schedule to fill our own gaps, and that means that we have had to have them sitting here waiting to go on. We have never said that somebody shouldn't come on Tuesday. We just said we're not going to delay our witnesses further to allow other people, because it has cost us a lot doing that, such as Dr. Capps. We have to have our people wait around.

So I would hope that we're not going to have a gap on Tuesday, considering it is Thursday and we have given

everybody our full list.

THE COURT: Okay. Well, I have been delighted at how somehow it's all worked out. The invisible hand. All right.

We still have five minutes. Does anyone want to speak?

No one? I will see you all at 8 o'clock tomorrow morning. We are now in recess at 4:56.

(Whereupon, the proceedings concluded.)

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STATE OF CALIFORNIA)
) ss
COUNTY OF FRESNO)

I, MYRA A. PISH, Certified Shorthand Reporter, do hereby certify that the foregoing pages comprise a full, true and correct transcript of my shorthand notes, and a full, true and correct statement of the proceedings held at the time and place heretofore stated.

DATED: January 9, 2024

FRESNO, CALIFORNIA

MYRA A. PISH, RPR CSR
Certificate No. 11613