CERTIFIED TRANSCRIPT

NATIONAL FEDERAL MILK MARKETING ORDER
PRICING FORMULA HEARING

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

Before the Honorable Channing D. Strother, Judge

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Carmel, Indiana

September 11, 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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MONDAY, SEPTEMBER 11, 2023 - - MORNING SESSION

THE COURT: On the record. Good morning. We have some housekeeping to take care of, I think. I don't know where to start.

We had Exhibit 165 from Mr. Contente, a dairy farmer witness here virtually. Exhibit 167 -- I put a hold on for admission.

Can we admit that?

Seeing no objections, Exhibit 165 is admitted.

(Thereafter, Exhibit Number 165 was received into evidence.)

THE COURT: We had 167, which was Edge-5, Witness Peterson. I think -- I don't think we had copies last time is what was going on, and now copies have been made available, I hope, at least to me.

Very well. Any objections?

Mr. Rosenbaum, you are looking --

MR. ROSENBAUM: I'm looking for the copies that have been made available.

THE COURT: Do you want a moment or --

MR. ROSENBAUM: No, apparently it is online.

THE COURT: Okay. You are all good?

So Exhibit 167, which was Edge-5, is admitted into the record.

(Thereafter, Exhibit Number 167 was received into evidence.)

THE COURT: Any other preliminary business?

Ms. Taylor.

MS. TAYLOR: Just to note, as you can tell, we're in a smaller room, and there's some cameras set up and mics. So please be careful when you are walking in this space, I was asked to say, so no one trips over and has a camera fall on them.

THE COURT: Okay. Dr. Bozic, welcome.

All right. Do we have -- should we put a witness on? Is it Paul Bauer?

MS. HANCOCK: Your Honor, our first witness is dairy producer Jacquier.

THE COURT: Vert good.

Raise your right hand, please.

JAMES JACQUIER,

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

THE COURT: You may proceed. Your witness.

DIRECT EXAMINATION

BY MS. HANCOCK:

Q. Good morning, Mr. Jacquier. Would you state and spell your name for the record, please?

A. James Jacquier, J-A-M-E-S, J-A-C-Q-U-I-E-R, also known as Cricket, C-R-I-C-K-E-T.

Q. Okay. And what is your mailing address?

A. 40 Shattuck Road, Andover, Massachusetts, 01810.

Q. And how do you spell Shattuck?

A. S-H-A-T-T-U-C-K.

Q. And did you prepare testimony in support of NMPF's proposals?

A. I did.
Q. And is that what's been identified as Exhibit NMPF-70?
A. Yes, it is.
MS. HANCOCK: Your Honor, I believe we were up to 168.
THE COURT: Yes, that's what I have. This NMPF-70 will be marked for identification as 168.
(Thereafter, Exhibit Number 168 was marked for identification.)
MS. HANCOCK: Thank you.
BY MS. HANCOCK:
Q. Mr. Jacquier, would you mind providing us with your testimony, please?
A. Well, thank you for the opportunity to testify today. My name is Cricket Jacquier. I'm a third generation dairy farmer and owner of Laurelbrook Farm in East Canaan. I work alongside my wife, parents, brother, nephews, niece, and son. Together we operate a diversified agricultural business that includes a 1500-cow dairy, 3,000 acres of corn and alfalfa, plus a compost and soil business. Our goal is to operate an efficient and sustainable dairy business that can be carried on for generations.
I am Chair of the board for Agri-Mark, Inc. Agri-Mark is a dairy cooperative owned by approximately 550 dairy farm families in New England and New York. Our members are pooled in Federal Order 1. Our cooperative

has been marketing milk for dairy farmers since 1916. We have headquarters in Andover, Massachusetts, and in Waitsfield, Vermont.

Our farm families supply more than 3.2 billion pounds of milk annually that we use to make our award-winning Cabot branded cheese, dairy products, and ingredients. Agri-Mark operates three cheese manufacturing facilities located in Cabot, Vermont; Middlebury, Vermont; and Chateaugay, New York. These are pooled supply plants.

In addition to cheese, the Middlebury, Vermont, plant also produces valuable whey proteins that are marketed around the world. Agri-Mark also operates a butter-powder facility in West Springfield, Massachusetts that is a non-pooled supply plant. Lastly, Agri-Mark supplies fresh fluid milk to the region's largest dairy processors.

I am a Director for New England Dairy Promotion, and prior Director for Dairy Management, Inc. Additionally, I am on the National Milk Producers Federation Board as a member of the executive committee, a position I've held since 2020. In that capacity I have witnessed firsthand the time and dedication of National Milk's member cooperatives and staff, as they collectively worked in lockstep for nearly two years on a comprehensive proposal to modernize the Federal Milk Marketing Orders.

Agri-Mark was a part of this process, and we support all aspects of National Milk's proposal. My testimony today focuses on our support of NMPF Proposal 1, increasing the Make Allowances in the component price formulas. I thank USDA for allowing me to represent Agri-Mark's farmer-owners and cooperative interests today.

As a cooperative owner and board chair, I know all too well that inaccurate Make Allowances are significantly and negatively impacting the cooperatives' businesses that I and my fellow farmer-owners have worked hard building for over a century. Cost of processing has increased for our cooperative by 20% since the last Make Allowance update in 2008. Labor, insurance, utilities, you name it. Agri-Mark is no different. Our costs of processing are consistent with data and testimony provided by others. The trend is clear, every cost has gone up, and we've waited too long to make a change.

As a farmer, I understand personally and directly the challenging nature of increasing Make Allowances. National Milk Proposal 1 will reduce pay prices for all farmers. None of us want to see reduced milk prices, especially in a year where dairy farmers are facing extreme financial challenges and margins at decade lows.

However, today’s inadequate Make Allowances have created a reality in which some farmers are already receiving reduced pay prices compared to their neighbors. This inequity goes directly against the fundamentals of the Federal Milk Marketing Order by creating disorderly markets. Proposal 1 takes a significant step towards correcting for this.

And As owners of primarily Class III and IV manufacturing, today's outdated Make Allowances have forced solutions within our cooperative. The increase in costs has been transferred to members via lower returns and pay price adjustments. It is hard to watch as we've been backed into a corner, having to make decisions that impact our members.

When these impacts are different than our neighbors, our competitiveness within the milk shed becomes tarnished. We must update Make Allowances at the Federal Milk Marketing Order level. This will alleviate the mismatched pressure placed on the cooperatives, thereby helping to return to the orderly markets Federal Milk Marketing Orders were intended to protect.

Today’s Make Allowances are also preventing our ability to invest in the future. The marketplace is looking for this investment and innovation, but with today's pricing, we struggle to meet the market's demands. We must make changes now and continuously into the future to ensure we can meet the bright future we see ahead for our industry.

National Milk's approach to update Make Allowances follows two tracks. First, NMPF Proposal 1 offers an immediate and interim update to the current Make Allowances. The Make Allowance numbers in Proposal 1 are intentionally set as a first step in the direction of correcting for today's woefully low Make Allowances. National Milk acknowledges that from a manufacturing perspective, the proposed numbers are not adequate to cover the increase in cost of processing since the last Make Allowance update in 2008. However, NMPF also recognizes that a more realistic increase would be abrupt and cause significant disruption to producers.

Second, National Milk is leading a legislative effort to improve the industry's ability to collect robust cost of processing data for use in future hearings and Make Allowance updates. National Milk plans to use the upcoming Farm Bill to give USDA authority to conduct mandatory and auditable surveys. Farmers and the industry at large need trust in these numbers to make future changes. Agri-Mark and many others support the need for this data and are working alongside National Milk to push this important legislative effort.

National Milk's stepped approach strikes a fine balance between manufacturing needs and producer impacts in the short-term. In the long-term, it creates a process where Make Allowances can be updated on a continuous cycle. Such a cycle is crucial to the success of our farmers and the manufacturing assets we own.

In summary, it is imperative that we address Make Allowances and address them now. Yes, a reduction in milk prices will weigh heavily on farmers. However, the reality is that farmers who are members of manufacturing cooperatives have already been carrying this burden for years. Deductions in milk prices that should be coming out of Make Allowances are instead being passed along to some farmers as market adjustments or reduced profit.

Additionally, inadequate Make Allowances are limiting cooperatives' ability to adequately invest in cooperative manufacturing assets, brands, and the overall success of their business. Successful cooperatives make successful farmers.

The trend of increased cost of processing since 2008 has been well documented by expert witnesses. We must update Make Allowances to alleviate the significant stress they are causing our cooperatives. I believe National Milk's two-step approach puts the industry on the right path, striking the right balance in the interim and lending support to both our farmers and cooperatives.

Thank you.

Q. Thank you for your testimony. I just wanted to follow up with a couple of questions.

This testimony is focusing on the support for the Make Allowance proposal that National Milk submitted; is that fair?

A. Yes.

Q. But you started off by saying that you support all of aspects of National Milk's proposals.

That's all five of them that National Milk has put forth for this hearing?

A. Yes.

Q. And in your support of all five of those proposals and talking -- well, strike that. Let me come back.

In your -- in your support of the Make Allowance

that you're talking about primarily in this testimony, you recognize that there is a cost that will -- that the dairy farmer will have to absorb if Make Allowances are increased?
A. Yes, I do.
Q. But you also recognize that with some of the other proposals that National Milk has put forth, there are aspects of that that can increase dairy farmer prices as well?
A. Yes.
Q. And is -- is your support of the increase in Make Allowance part of your support for the totality of all five proposals that National Milk has put forth?
A. Yes.
Q. So in support of a complete package?
A. Yes. So I'm here today testifying on the Make Allowance individually, which we fully support. Okay? For example, if -- with just a Make Allowance adjustment, all by itself, that is really important for farmers as well, as we have had -- there's an opportunity here for us to increase the Make Allowance, which will decrease the farmer pay price, right?
But at the same time, we are already covering those costs within our cooperative, so our farmer price adjustments will actually be reduced as well. So it's really we're already carrying that burden, and we need to get this corrected in the Federal Milk Marketing Order process now.

Q. Okay. And you might get some additional questions about whether there's a natural offset about that, but maybe I just ask you now. Is -- is it -- is it a one-for-one offset between what the dairy farmers are expecting to receive with a Make Allowance increase and what will be deducted out of their milk check?
A. Yeah. So being part of all of the discussions, you know, comprehensive approach was really, really important. All of the work that's gone behind this to get to this point to come to you all with this has been a really important part to have -- really to try to become, I guess, as cost neutral as we could to the farmer, if you will, through a comprehensive approach. We feel that's the best way. But today I'm here just speaking directly to the Make Allowance.
Q. Okay. And is that because in your experience, on your farm, and for the farms that are around you that you know, you recognize that there's a lot of financial pressures on dairy farmers today?
A. There absolutely is. And -- yes.
Q. Is there a lot of margin left in a dairy farmer's paycheck to absorb cost increases in excess of what National Milk has proposed?
A. You know, there's -- there's not a lot of margin right now in the dairy business for this year. And certainly, as we -- as we look at the go-forward -- that's why I think it's really important that this comprehensive approach that we're taking makes the most sense. I think

the numbers that we're seeing in the National Milk, that approach is -- is kind of the right balance, if you will, between the two.

But as you look at Make Allowance specifically, I know there's been a broad range of numbers that have been out there. But given the data that we have had to work with, we feel that's the right balance at this point in time. And it's also really important that we have the next step, and that is the mandatory cost surveys and all of that that will allow us to update those with real auditable in data in the future.

Q. Okay. Thank you.

MS. HANCOCK: Your Honor, at this time we'd make him available for cross-examination.

THE COURT: Cross-examination for this witness?

Mr. Rosenbaum.

CROSS-EXAMINATION

BY MR. ROSENBAUM:

Q. Steve Rosenbaum for the International Dairy Foods Association.

I assume that you would agree that USDA has the obligation to examine each proposal individually and only to accept those that it determines are meritorious?

A. Yes.

Q. And so if they were to determine that some of your proposals are meritorious and some are not, they would be obligated to accept the ones that are meritorious and reject the ones that are not; is that fair?

A. Yes.
Q. I mean, you are not suggesting that it is an up or down decision on all your proposals at one time, are you?
A. No.
Q. Are you -- are you aware that Agri-Mark was actually the principal proponent of the Make Allowance revisions that took place in 2007 and 2008?
A. Yes.
Q. Were you around -- strike that.
Were you involved in Agri-Mark at that point in time?
A. I was not directly. I joined the board in 2010.
Q. Okay. Has -- are you aware that Agri-Mark endorsed USDA's reliance upon survey -- surveys conducted by -- by Mark Stephenson in support of its proposal at that time to raise the Make Allowances?
A. Yes, I am. And I believe we have participated in all three of the surveys.
Q. Has Agri-Mark lost confidence in any way in the reliability of Mark Stephenson's work?
A. We contribute -- I don't -- could you ask that question again?
Q. Yes. I mean, in 2007 and 2008, Agri-Mark urged USDA to rely, in part, on Mark Stephenson's cost surveys to determine what the Make Allowances should be.
And I assume that when -- at that time, Agri-Mark had confidence in the reliability of Dr. Stephenson's work; is that fair?

A. I would just say that we contributed -- you know, we brought forward our numbers for the cooperative and believe that they were put in good hands. You know, I think, right now, as we look at this, we need to have larger numbers of surveys out there to make sure that we're representing a broader spectrum of the dairy industry or the dairy processing, if you will, across the country.
Q. Okay. Well, Dr. Stephenson will testify as to what has gone into his most recent survey?
But have you -- I mean, has Agri-Mark as an institution lost any confidence in Dr. Stephenson?
A. I don't believe I can answer that accurately.
Q. Have you personally?
A. No.
Q. Okay. Have you -- now, so it is -- if I read your testimony correctly, Agri-Mark acknowledges that the -- number one, the current Make Allowances are too low in terms of current cost of production, correct?
A. Yes, sir.
Q. And it is Agri-Mark's view as well that the National Milk Producers Federation proposal as to how much to increase the Make Allowances does not increase the Make Allowances enough to actually cover current costs of manufacture; is that correct?
A. Could you restate that question?
Q. Yes. That the -- am I correct that Agri-Mark is of the view that the National Milk Producers Federation

proposed increases in Make Allowances is not a large enough increase to actually cover the increase in costs of production since 2008?
I mean I'm --
A. That's true.
Q. -- I'm paraphrasing --
A. That's accurate.
Q. -- the fifth paragraph on --
A. Yep.
Q. -- on the second page of -- of your testimony here in Exhibit 168.
A. Uh-huh.
Q. And -- so -- but you have -- you have suggested that there would be a mandatory survey conducted, correct?
A. Yes.
Q. Have you performed any analysis of what the time table would be by which USDA would be able to conduct -- well, assuming that USDA to begin with is given the legislative authority to conduct such mandatory surveys, what the time table would be over which USDA would realistically be able to implement new Make Allowances based upon such a mandatory survey, assuming they are given the authority to conduct one?
A. I'm not aware of the exact time table that that -- how that process --
Q. Are you aware that the proposed legislation -- which is supported by all facets of the industry, including my own, I'm not suggesting we're not in favor of

there being that authority -- but have you -- you know, have you -- do you have an estimate as to how many years it would be before we actually would have the ability to have new Make Allowances?
A. Well, I understand I don't have -- I understand that we're going to -- you know, with the changes that National Milk has put forward, that's a step one. Right? We have to do the -- there's a process to go out and gather that data. I think that some of this data has -- we have got some experience now, if you will, to collect some of that data. And if it is mandatory, I believe that data can come in, and I feel that we'll have an effective tool to move forward, to move our industry ahead, at a respectful timeframe.
Q. Have you assessed, for example, how long it will take USDA simply to adopt regulations carrying out its newfound power to conduct mandatory surveys, assuming that it actually has been given such power by Congress?
A. I don't know that exact timeframe.
Q. And do you -- are you familiar enough with the proposed legislation that you are aware that USDA is not under the legislation given the authority on its own to increase Make Allowances based upon that data?
A. Right.
Q. That there would have to be another hearing?
A. Yes.
Q. Like the one we're in now, correct?
A. Yes.

Q. And the same process of people -- witnesses being called, cross-examined, corrections to the transcript, post-hearing briefing, a recommended decision, followed by the final decision, unless the conditions for an emergency ruling have been met? Are you familiar with that whole process?
A. Yes.
Q. I mean -- okay.
And all the while, the processing industry, will be operating under Make Allowances that, by your own statement, are inadequate to cover the increase in cost of processing, as it exists today; is that fair?
A. Yes.
Q. I want to talk about -- at least ask you a question. Is there another -- let me just start by saying, is there another Agri-Mark witness going to take the stand as well, or are you the only one at this point?
A. For the Make Allowance alone?
Q. Yes.
A. We have -- yes, we have one more Agri-Mark person that would be --
Q. Okay. You said -- I'm just trying to, frankly, figure out who I should be asking these questions about. Okay. Maybe it is you, and maybe it is the other witness.
But you make a statement that "the cost of processing has increased for our cooperative by 20% since the last Make Allowance update in 2008."
Are you -- were you involved in performing that

calculation?
A. No. I was not involved with that calculation. The next witness could explain that further.
Q. Okay.
A. That was an average of all classes of milk. That was an average 20% increase from 2008 to now. That's how that came about.
Q. And just if I were to tell you that Land O'Lakes testified that their costs have increased by over 70% -- or provided numbers that so indicate, that's probably a fairer way to describe it -- do you have any idea why there would be such a disparity?
A. I'm just speaking to the numbers that we have for Agri-Mark. As we benchmark our facilities, we use the Make Allowance numbers to benchmark our facilities each and every day.
Q. And what -- okay. Do you know which plants, which Agri-Mark plants participated in whatever analysis was performed to come up with that 20% number?
A. I believe -- I need to be accurate, so I'll let the next witness speak to that specifically, if you will.
Q. Okay. Okay. And you do have a statement: "Deductions in milk prices" -- I'm looking at the last -- let me start again.
If you turn to your -- to your testimony, Exhibit 168, to the second page, the next to the last paragraph, you say: "The reality is that farmers who are members of manufacturing cooperatives have already been

carrying this burden for years. Deductions in milk prices that should be coming out of Make Allowances are instead being passed along to some farmers as market adjustments or reduced profit."

Do you see that?

A. Yes.

Q. Okay. And are -- are those deductions sufficient such that some farmers are not being paid the blend price for their milk?

A. Agri-Mark pays the Federal Milk Marketing Order announced price, but we also have a line item market adjustment for transparency to our membership that adjusts that price.

Q. Okay. And most --

A. A lot of that is due to the inadequate Make Allowance numbers that are involved, but also just the -- some disorderly marketing within the Federal Milk Marketing Order.

Q. If one nets one against the other, do you end up with a paycheck to your farmers that actually is less than the blend price?

A. Can you repeat that question? I'm sorry.

Q. Sure. Once you deduct those deductions, is the net amount received by your dairy farmers something less than the blend price?

A. Yes.

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

THE COURT: Further cross?

Yes, Dr. Bozic.

CROSS-EXAMINATION

BY DR. BOZIC:

Q. Good morning. Marin Bozic for Edge Dairy Farmer Cooperative.

We don't know which of the five proposals USDA will adopt or deny; would that be a fair statement?

A. Yes.

Q. And should USDA decide to grant National Milk the -- or to approve the increase in Make Allowances per National Milk's request but deny changes to all other four topics, so no increase in milk composition, no removal of barrels, no increase in return to higher-of, and no change in the Class I differentials, so just Make Allowances on their own, if everything else is denied, how would that -- what would be the impact of that change on your farm?

A. The impact of Make Allowance alone on our farm, So there would be almost no impact. Okay? Because the Make Allowance adjustment is a decrease. We're getting market adjustment. That would be offset. So there's zero impact.

Q. Would that be -- would that extend also to Agri-Mark producers in general?

A. For Agri-Mark producers, yes.

Q. So would it then be fair to say that Make Allowance increase is only fair in the context of a broader -- would it be fair to say that the Make Allowance increase is only beneficial in the context of a broader

package?
A. Correct.
DR. BOZIC: Thank you.
MR. MILTNER: Sorry, for the record, can I go back to that last question that you just -- is that -- how do you do that? Sorry.
THE COURT: You may. You can -- you don't have an objection to that, do you?
DR. BOZIC: No, I just --
THE COURT: You can -- if you want to follow up, you can --
MR. MILTNER: I just wanted to restate the question.
THE COURT: I don't want to go back and forth.
Thank you, Mr. Miltner.
MR. MILTNER: Would you restate your last question.
DR. BOZIC: Yes.
BY DR. BOZIC:
Q. If USDA -- okay. So where were we? Would it be fair to say that in the absence of the full package, a change in the Make Allowance alone would not be beneficial to your farms?
A. Not be beneficial to our farms? That's incorrect.
Q. That is incorrect?
A. Yeah.
Q. Could you please elaborate?
A. So --

Q. If anything -- if nothing else changes, only Make Allowances go up, I'm looking for --
A. It would be -- okay. So it would be cost neutral to our farms.
Q. Uh-huh.
A. That's where it is.
Q. Okay.
A. Okay.
Q. And if it's a cost neutral to your farm, is that beneficial, harmful, or neutral?
A. It's bene- -- it would be beneficial for us because our cooperative -- our cooperative is getting hurt. We're lacking the investments that were needed. We need orderly marketing throughout. So it's important that this gets -- that the Make Allowance is part of it.
Q. So in other words, even if USDA comes forward with the rule that nothing else is changing, only Make Allowances go up, you would represent that to your fellow farmers as a beneficial change?
A. It's -- it's one of the -- it's one of the changes that would be challenging for a lot of farmers. But our unique situation, given that we have Class III and Class IV assets, this is beneficial for our farms to -- if it was even just the Make Allowance. But we are really after the whole comprehensive package here to get to where we need to be.
Q. The part that I don't understand is, like, how can it be at the same time cost neutral and beneficial?

A. So -- so the Make -- so the problem is I see it as the fact that, you know, across the country, we're getting -- it's kind of pitting farmers against farmers is what's happening with the Federal Milk Marketing Order system and the Make Allowance. We -- so a step in the right direction is correcting at least a part of this, which is -- which is the Make Allowance. So that's why I feel it would be beneficial for us to get that part of it at least taken care of now.
DR. BOZIC: Thank you very much.
THE COURT: Thank you for allowing that, Mr. Miltner.
MR. MILTNER: No problem at all.
CROSS-EXAMINATION
BY MR. MILTNER:
Q. Ryan Miltner representing Select Milk Producers.
Good morning, Mr. Jacquier.
A. Good morning.
Q. Have you been listening to any of the hearing while it is been going on or --
A. You know, I have not.
Q. Okay. That's probably good.
I have asked questions of a number of witnesses about the products they produce at their various plants that affect the Make Allowances and the other formulas, so that's where I would like to start my questions with you. Okay?
A. Sure.

Q. Your plant in Cabot. You note that it produces cheese, and I'm -- I'm really familiar with the Cabot brand cheese. Really enjoy it.
Is that what is produced at that plant, that Cabot aged cheddar cheese?
A. Yep. Cabot -- Cabot produces cheese and yogurt culture.
Q. Okay. Is it just that cheddar cheese that's produced there that I -- you know, I can find that at Kroger or Costco or wherever?
A. Yeah. And a lot of flavored cheeses as well.
Q. Okay. Does it produce any 40-pound block cheddar that would be reported to the NDPSR?
A. So we produce 40 and 640s.
Q. Okay.
A. Both.
Q. And are those reported to the NDPSR, those cheddars?
A. So that question I would have to refer to our next witness, if you will.
Q. Okay.
A. Sorry, that's a little out of my --
Q. That's quite all right.
A. -- to be accurate.
Q. What type of yogurt -- did you say yogurt or cultured products produced there? I forget exactly what you said.
A. Cultured, so -- yep.

Q. So a lot of -- or a -- how much of the production there would be those Class II cultured products?
A. It's a small percentage. Again, I think those details you would have to ask our next witness.
Q. Okay. Thank you.
The Middlebury plant, does it produce a similar product profile as the Cabot plant?
A. The -- yes, cheese.
Q. Okay. And the plant in Chateaugay, what do they produce there? What do you produce there?
A. Chateaugay produces cheese as well.
Q. The same types of cheese produced at the other two?
A. Yes.
Q. And then the whey processing at Middlebury, do you know, do they produce dried whey or whey protein concentrate?
A. WPC, dry whey, sweet whey.
And to be accurate, I need to go back to the Cabot plant.
Q. Sure.
A. The Cabot is just the 40-pound block, I believe, and not the 640s there.
Q. Okay.
A. Middlebury is the only one doing the 640s and the cheddar. And the 40.
Q. Do any of those plants produce barrel cheese?
A. We do not produce barrel cheese.

Q. The West Springfield plant, does it produce butter and powder?
A. Yes, it does.
Q. And of the butter it produces, would it be producing bulk salted butter?
A. So we have -- we have branded -- we do a lot of branded salt and unsalted butter.
Q. Branded butter, that's in a one-pound package quarters that you would buy at the grocery store, correct?
A. Yeah.
Q. Okay. Do you know if it produces its butter in bulk volumes for sale to commercial operations?
A. I'm going to leave that for the next witness.
Q. That's great. I appreciate that.
A. You are getting into some details that I want to be 100% accurate. Okay?
Q. Of course. I appreciate that as well.
I think in response to Mr. Rosenbaum you said that Agri-Mark did participate in Dr. Stephenson's cost studies. That's -- I heard that correctly?
A. Yes.
Q. Okay. Did Agri-Mark also provide its cost information to National Milk's survey of members when it was preparing Proposal 7?
A. Yes.
Q. And did it report costs for all four plants?
A. That level of detail should be asked by the next.
Q. Great.

The Springfield plant, I think in your statement you refer to it as a non-pooled supply plant. Why does Agri-Mark choose not to pool that plant but to pool the cheese plants?

A. There's a -- I guess, to be honest with you, there is some history there. It's been that way for 30 years, and it just hasn't been back to a pool plant. But all of our member milk is pooled.

Q. Okay. I had a question about a couple of statements -- or sentences in your -- in your statement that I was hoping you could help me understand a little more fully.

At the top of page 2, you testified that "today's inadequate Make Allowances have created a reality in which some farmers are already receiving reduced pay prices compared to their neighbors."

And I wonder if you could give us an example of how that's happening with your part of the world and -- and what kind of discrepancies might be occurring?

A. Sure. So certainly being from the Northeast, with Class III and Class IV as being our -- you know, our major landing spot, if you will, for milk making cheese and yogurt, we are more impacted than maybe somebody just going directly to a Class I market type stuff.

And so the Make Allowances play a significant role in our ability to really derive profits and put accurate -- to put adequate investments, if you will, into our plants' infrastructure and equipment that's necessary.

So when you just really go not too far away from us, you know, we have to adjust with that to our farmers, with the market adjustment, if you will. And you can -- you don't have to go too far, and it could be very different for somebody else, just because of the assets that they own or their outlet for their milk. So it is very different for many across the country.
Q. Would it be accurate to say that the difference in producer pay prices in your region are a function of which cooperative is marketing the milk and the costs that that cooperative has for operating its plants?
A. Yes.
Q. And then further on page 2, it's in the third paragraph, where you -- you state, "The marketplace is looking for this investment and innovation, but with today's pricing, we struggle to meet the market's demands."
What are the market demands that Agri-Mark is not able to meet?
A. We're in a position right now with, you know, lacking the investment in our brand. As you know, we have a lot of branded product. Our Cabot brand is really important for us, and it has really carried the weight, if you will, for our farmer-owners there in the Northeast. And given the current situation where there's really pretty flush in milk in the Northeast, and as you know, the West Springfield plant, which was referred to in parentheses as a balancing plant, you know, it just

balances really our internal member milk supply and demand, and it fluctuates really daily, weekly, however. It's just reacting to our own members' milk.
So that balancing facility is running full. So I don't know if you want to call it a balancing facility anymore. It's just a manufacturing plant. And also, our cheese plants are really balancing our member milk as well from a standpoint of making branded cheese and then commodity cheese.
So our plants are flush, and we are looking -- we need investment to put in to handle the growth in our business, to invest in our business, to invest in our brand, to get out in that marketplace, and really move the needle for our farmers. And we are very held back, if you will, from that standpoint as we are constantly, like I have said, benchmarking against Make Allowances, as we're investing in operational efficiencies at our plants to get us to make sure that we can stay there.
But we need to go further, faster. Our member-owners are looking for opportunities for milk. We have great ideas, but we have the inability to enact on those.
Q. Thank you for that -- that additional context.
In terms of all the cheese that Agri-Mark produces, is -- is more of it the Cabot branded cheese or is it more of it the commodity cheese?
A. We have more commodity cheese.
Q. Okay. When Dr. Bozic was asking you some

questions about the impacts of Make Allowances, I think I heard you suggest that the impact of the Make Allowances would offset the deduction that Agri-Mark has on its paychecks.

Did I gather that correctly?

A. Yes.

Q. Okay. Have -- has Agri-Mark done an estimate about -- or National Milk for that matter -- about what the pay price impact for your members would be just on the adoption of the Make Allowances?

A. Could you repeat that question?

Q. Sure. Has Agri-Mark tried to peg a number and say, if National Milk's Make Allowances numbers get adopted, this is what we think the impact on our members would be?

A. I believe I have seen the numbers around $0.50.

Q. Okay. I normally wouldn't ask this question, but because you have kind of let it into the testimony, does that mean that the deduction you're imposing on your members each month is $0.50?

A. No.

Q. So if the Make Allowances are changed as National Milk requests and the blend price or the uniform price drops $0.50, how does that leave your producers in the same spot then?

A. If we reduce the pay price $0.50, there will be $0.50 less on the market adjustment.

Q. Okay.

A. That's why it's neutral.
Q. Okay. So your market adjustment is more than $0.50 then, I would surmise.
Mr. Rosenbaum said that the answer wasn't audible, if you could say that again.
A. The answer wasn't audible?
Q. Yes.
A. So which answer would you like?
Q. The last question I believe was that I can surmise that Agri-Mark's market deduction is more than $0.50?
A. Right.
MR. MILTNER: Okay. I don't think I have anything else. Thank you.
THE COURT: Very good, sir.
Further cross of this witness?
Seeing none, redirect.
MS. TAYLOR: AMS has a couple questions, your Honor.
THE COURT: I'm sorry.
MS. TAYLOR: It is Monday morning.
THE COURT: I'm not in the swing of things yet. AMS has a special status as to cross, so when I say cross the first time, it doesn't include AMS. Yes, I intended to go back. Sorry.

CROSS-EXAMINATION

BY MS. TAYLOR:
Q. Good morning.
A. Good morning.

Q. Thank you for coming to testify today.
I wanted to ask first just a couple of questions about your farm and not on the co-op. We have asked other producers here, we are gathering information about the impact to small businesses, and for the Small Business Administration, they define it for a dairy farm as that making $3.75 million or less in revenue on a whole -- gross revenue annually on a whole farm basis.
Would your farm meet that?
A. No.
Q. We have also asked other producers when it comes to risk management, there's been talk all through the last four weeks about, you know, if USDA does make some of these changes, kind of what would the implementation timeframe be and discussion on how that could impact risk management positions of dairy farmers.
So do you use risk management tools?
A. So, currently, you know, from a DRP example, we do not use DRP today. I have been -- I have used DRP for last year. Just haven't seen the opportunity this year to use that risk management tool.
Q. Thanks.
And when you did use it, about how far out did you look to lock in positions?
A. About one year.
We also use -- have used LGM. I do not have any of that right now as well.
Q. Okay. Thank you.

Now, on the co-op, switch over to the co-op side of things.
A. Sure.
Q. Can you give us a little description of your co-op members? Are they similar in size to you, in the range, etcetera?
A. Okay. So -- well, maybe in the context from a small business, right, the $3.75 million, I guess that perspective is -- if you put it in context of maybe that's around 400 cows --
Q. Uh-huh.
A. -- 85% of our membership would meet the small business. So we have a large group of small farms in the Northeast, in New York.
Q. Thank you. Your testimony and in cross you talked about the impact of Make Allowances and the, as you term them, inadequate levels and how that's been on your farmer members in your deducts and pay prices. I just wanted you to expand a little bit more, and you did touch on it, about how that is an inequity between your member farms and then non-member farms in the area, and I wondered if you could expand on that just a little bit.
A. Yes. So I think it comes back to maybe why we're here. You know, the Federal Milk Marketing Orders have -- there's a lot of opportunities in my mind from a disorderly marketing. And, you know, our cooperative has had to do a lot of explaining to members, if you will, of like why there's that market adjustment that may be

associated with some of the Make Allowances type things.

But also understand that, you know, it's not just about me. You know, our farm is really important. Our farmers are really important as a cooperative. But, guys, it goes even broader than that. And to me, that's where I think, you know, organizations like National Milk, where we've spent a lot of time building consensus that, no, we have to compromise here a little bit. We're going to -- I think the steps we need to get in place to where we need to be, I think we're all learning a lesson here today as well, that time has gone too long, that we're here, and we need to be more frequently making sure that we're updating this to accurately reflect the marketplace.

And, you know, I keep thinking about Federal Milk Marketing Orders and what are they -- why are they here? What do they do? You know, we shouldn't be negatively talking about them. They should be working for us. And, you know, for -- for us, these Federal Milk Marketing Orders are here to -- we talk about orderly marketing, but it is to realize the true value for our milk, and they need to do that. And along the way we need to make sure our processing assets can be invested in, and at the same time our farmers are a key part of this as well. So we need to strike that right balance.

Q. And on the investment side of things, I was -- you talked about how you -- the Make Allowance will help the co-op -- or let me rephrase this.

You talked about inadequate Make Allowances are

limiting the cooperative's ability to adequately invest. So adequately means, to me, that you have done some investment --
   A.   Yes.
   Q.   -- maybe not as much as you all would like and in the form.
        So could you expand on what Agri-Mark has done, you know, in the last 10 to 15 years?
   A.   Sure. So we look at it maybe, you know, two real key investments, one in Chateaugay, at our Chateaugay facility, a $30 million investment to really increase some production there, capacity, and produce more cheese. And in addition, at our West Springfield plant, to increase some of the drying capabilities as well.
        But really, these investments are a reaction to really member -- member needs, maybe not so much cooperative needs, as the need to grow from our farmer-owners is really important. So, you know, we'd really like to get to that next level, if you will, of investments that really can move the brand and put innovation back into the marketplace, all of those things that we feel are really important. Not just from a cooperative standpoint, but as a farmer-owner, those types of things are absolutely imperative for the -- for our long-term multi-generational dairy farmers, which really is the majority of our farms across the country.
   Q.   So I think I took from that, when you say your investments have been more for your member needs, is that

more just to find ways to take all your member milk at this point, right?
A. We significantly lack processing in the Northeast. We significantly lack it. There's lack of investment going on. And a lot of it is from the reason why we're here today.
Q. Uh-huh. Okay. Thank you.
My last question is you have a sentence in here, and you talked about how this is a compromise position, and you say that "National Milk recognizes that a more realistic increase would be abrupt and cause significant disruption to producers."
Could you expand on that thought?
A. You know, I think there's another approach maybe to go a little stronger on the Make Allowance adjustment. Right? And I just think that -- I go back to the impacts to what that farmer community is. That's kind of why we have got to this point. We have gotten to a consensus, and we have also gotten to a point of where we lay out that roadmap where we can get accurate data, real cost. Because I think once the real data gets in front of a farmer, we can support of where that movement needs to go. So I think that's more of where I was saying on the adequate investment side I was referring to.
Q. Okay. But you also said "a too abrupt increase would cause significant disruption to producers."
And I'm just curious what you --
A. Well, that's, you know, going significantly here

today to I think I have heard $1.50 type stuff. That is a significant impact right away for farmers, if you will. Okay? And it's really important that we stay together on all of this type of stuff. I understand that there's the processor side, there's the co-ops, and there's our farmers. So we got to strike that balance. I think that's really, really important to -- as we move forward.

MS. TAYLOR: That's it from AMS. Thank you so much.

THE WITNESS: Thank you.

THE COURT: Any further questions for this witness?

Redirect.

REDIRECT EXAMINATION

BY MS. HANCOCK:

Q. You were asked some questions about risk management practices, and I think you said that you have used it in the past, but you are not currently using some of the tools. I'm wondering if you could expand on that a little bit and talk about why not right now.

A. Yeah. So I might approach this a little bit differently than you might think. Just thinking from the farmer perspective, we have a great tool now called DMC. Right? That we have to remember a majority of our farms across the country are still small farms, and we have -- all farms can participate in the DMC component of that right now. So every farmer is getting used to some risk management tool behind the scenes, which is fantastic.

There's also another layer called the Dairy Revenue Protection. That really is for farms maybe above that 5 million pounds of milk on an annual basis. And I think we're learning. I think you have to recognize that farmers in the last couple years were just getting more used to and accustomed to risk management. And, you know, certainly as we look forward, the futures pricing and those types of things, there is a lot of folks that don't see the opportunity today to lock in so-called near-the-break-even price for milk.

So I think that's why there's a lack of participation or less right now than there might have been, say, two years ago where the market outlook was quite different. So these tools are really important for us in the future, for sure.

Q. Okay. So whereas even if you are not using it right now, it's just situational depending on what the market conditions are?

A. That's true. Those -- I look at those weekly, opportunities.

Q. And I think you were talking with Mr. Miltner about the market adjustment deductions in a dairy producer's paycheck coming out of your cooperative. I'm wondering if you could -- if you would be willing to share what all is included in those market adjustment deductions.

A. So we look at -- I mean, one of our challenges from the Make Allowance has really been able to address

the home for milk from a standpoint of investment. Right? So really it's the -- some of the balancing type stuff that is -- that is part of -- for our own cooperative that we include in that.
Q. Okay. And is that because the cooperative has a responsibility that it owes to its members to take all of the milk?
A. Absolutely.
Q. And that's whether you have a place to put it and -- or manufacture it; is that right?
A. That is correct.
Q. Okay. So different than a proprietary plant, for example, where they can just choose not to take milk if they don't have a place to put it?
A. Yes. Accurate.
Q. Okay. And -- and so the additional cost that the cooperative has to incur, it's able to deduct those balancing costs out of those market adjustments as well?
A. That is correct. That is -- that is the case that's happening, just because of, again, the main reason why we're here today.
Q. Okay. And then I think you also talked about the confidence level that you have in Mark Stephenson's survey. And I think if I heard you right, it wasn't lack of confidence in his ability to conduct the analysis, it was lack of confidence in whether he had the most comprehensive dataset, available to him when he was conducting that survey; is that right?

A. That is correct.
Q. Okay. And you understand as part of your role with National Milk that National Milk does not have the confidence that it would like to see in a voluntary unaudited survey?
A. A voluntary situation didn't work in our minds.
Q. Okay. And when you compare and contrast the two surveys that he did most recently, were you able to see some evidence of that?
A. Repeat the question? I'm sorry.
Q. Yeah. In your role with National Milk and you were able to look at and evaluate the two most recent surveys that Stephenson conducted, you were able to see some evidence of how with some additional input it gets even more accurate; is that right?
A. Yes.
Q. And so your expectation is, is that with an mandatory survey that's audited, that you will have an even greater level of confidence in those numbers?
A. And I think that's really important for dairy farmers.
Q. And that's -- and when you say "that's really important for dairy farmers," one final question, when you were talking about the need for Make Allowance, you're somewhat wearing the processing hat that you wear; is that right?
A. Yes. But, you know, as a dairy farmer, the market is just as important as my -- the cooperative success is

just as important as my farm business. They go hand in hand. Without one, the other doesn't exist. And I think our farmers, we are all realizing how important our market is and our marketing in our -- our -- and where this product lands. We're just so tied into it. So we're vested into that. We're invested in it every single day. And it is just another arm or extension, if you will, of my farm that needs to be sustainable.

Q. Okay. And that's because your farm alone isn't enough to -- to keep you alive and well, you have to rely on the profits coming out of the processing side of the business as well?

A. Right. True -- right.

MS. HANCOCK: Okay. Thank you.

That's all I have, your Honor. We would move to admit Exhibit 168.

THE COURT: Mr. Miltner and Mr. Rosenbaum both have follow-up. A door got opened on redirect?

MR. ROSENBAUM: Some questions were asked, yes.

RECROSS-EXAMINATION

BY MR. ROSENBAUM:

Q. Steve Rosenbaum, again, for the International Dairy Foods Association.

But when did you make the $30 million investment in -- you pronounce it as Chateaugay, but I'm not sure I'm saying that correctly.

A. Chateaugay.

Q. Chateaugay.

A. We made that over the last about four years.
Q. Okay. And what about West Springfield, the increased drying capability?
A. We have been working on those investments over the last four years as well.
MR. ROSENBAUM: Okay. That's all I have. Thank you.

RECROSS-EXAMINATION

BY MR. MILTNER:
Q. Ms. Hancock asked a couple of questions about your -- the market -- market deduction or market adjustment.
What term do you like to use for that?
A. The market adjustment.
Q. Market adjustment. Okay.
It sounded like part of that market adjustment was triggered by production within your membership that can't be easily handled at your existing facilities; is that correct?
A. Yeah. Yes.
Q. Okay. Does Agri-Mark have a base program?
A. Agri-Mark does have a base program.
Q. Okay. And as I understand, it's a $5 deduction per hundredweight on overproduction; is that correct?
A. That is incorrect.
Q. It is incorrect.
A. We have a base program that's been in place, and it's basically due to the lack of being able to balance

our own internal member milk supply.
Q. Okay. So if there were reports in what I will call the dairy press that overproduction -- over-base production was a $5 deduction, that would not be correct today?
A. Correct.
Q. Okay. Was that an accurate number at some point in the last five years?
A. No.
Q. Okay. So whatever the number is right now, it's not sufficient to cover the cost associated with your membership's overproduction?
A. Correct.
MR. MILTNER: Okay. Thank you.
THE COURT: Re-redirect?
MS. HANCOCK: Your Honor, I'd just move to admit Exhibit 168.
THE COURT: Any objection?
Oh, yes.
MR. HILL: Not an objection. I just note that the copy that we have in the room has a number at the bottom of page 1 that says 20%, whereas the online version has an X. So I just want to make sure that we get the correct copy.
MS. HANCOCK: Thank you for that. I should have noted that. And I think that he submitted that this morning because he realized it was an omission in the version that he submitted earlier. So if you don't have

it, we'll resubmit it for your electronic files.
MR. HILL: So as long as it has the 20% on it, we're fine with it being admitted. But it is not online.
THE COURT: Yeah. Thanks for that note. And our official keeper of the exhibits has the 20% version?
MS. TAYLOR: We didn't get it electronically.
MS. HANCOCK: Okay. We'll make sure you do.
THE COURT: Very good. Thank you.
With that, Exhibit 168 is admitted into the record.
(Thereafter, Exhibit Number 168 was received into evidence.)
THE COURT: You can step down. Thank you.
THE WITNESS: Thank you.
THE COURT: Ten-minute break. Let's come back at 9:20 a.m.
(Whereupon, a break was taken.)
THE COURT: On the record.
MS. HANCOCK: Your Honor, next witness will be Christopher Wolf.
THE COURT: Raise your right hand.
CHRISTOPHER WOLF,
Being first duly sworn, was examined and testified as follows:
THE COURT: Your witness.
DIRECT EXAMINATION
BY MS. HANCOCK:
Q. Good morning, Mr. Wolf. Would you mind stating

and spelling your name for the record?
A. Christopher Wolf, C-H-R-I-S-T-O-P-H-E-R, W-O-L-F.
Q. And what is your business address?
A. 137 Reservoir Avenue, Ithaca, New York, 14853.
Q. And did you prepare Exhibit NMPF-27 in support of your testimony today?
A. I did.
MS. HANCOCK: Your Honor, if we could mark that for identification as Exhibit 169?
THE COURT: So marked.
(Thereafter, Exhibit Number 169 was marked for identification.)
BY MS. HANCOCK:
Q. Would you mind starting off by providing us with some of your background, your educational background and then your professional background?
A. Sure. So I have a Bachelor's degree in agricultural economics from the University of Wisconsin Madison, a Ph.D. in agricultural economics from the University of California Davis. And I'm currently the E.V. Baker professor of agricultural economics at Cornell University.
Q. When did you obtain your -- your -- well, let's starts with your undergrad degree?
A. '91. And Ph.D. in '97.
Q. And when you said you are currently the E.V. Baker for agriculture, can you tell us what that means?
A. I have a chair, a special chair at Cornell

University in agricultural economics.
Q. A special chair?
A. Yes. Well, it's a named professorship. So it's -- put the title on afterwards. I'm the second holder of the E.V. Baker chair.
Q. And what falls under the scope of the responsibilities that you hold at Cornell?
A. Well, both of the holders of this chair have been working specifically in the dairy industry in dairy markets and policy.
MS. HANCOCK: Your Honor, we would offer Dr. Wolf as a dairy market and dairy economist expert to be qualified.
THE COURT: Seeing no objections, I so find.
MS. HANCOCK: Thank you.
BY MS. HANCOCK:
Q. Dr. Wolf, would you mind providing us with your testimony?
A. Sure.
Q. I guess I didn't verify first if you were able to get your computer online yet.
A. I will have it up momentarily. Sorry.
THE COURT: Did we get an address for him?
MS. HANCOCK: We did.
(Off-the-record.)
THE WITNESS: Happy to be here. Thanks for having me this morning.
In this testimony, I would like to offer an

academic perspective on dairy farm financial information, particularly considering farm management and ag lender aspects. My intention is to discuss the financial conditions on dairy farms --

MS. HANCOCK: Just briefly, I forgot to remind you, if you just could be mindful of your speed for our court reporter as well.

THE WITNESS: I'll try to go slow. Thanks.

My intention is to discuss the financial conditions on dairy farms and the factors that describe the financial conditions. My testimony provides background on dairy farm profitability, financial risk, and the cost of production as well as the factors driving those measures.

Profitability is the extent to which net income is generated and represents a return to labor, management, and capital invested. There are multiple measures of dairy farm profitability. To measure the profitability, I prefer to use the rate of return on assets without appreciation, which is ROA. ROA is defined as operating profit divided by total farm asset value, which controls for asset size allowing for comparisons across farms and over time.

ROA measures before tax profitable earnings per dollar of investment in assets and reflects how efficiently the farm business uses all assets, whether borrowed or equity capital, to generate profit.

Using the Cornell Dairy Farm Business Summary, the average rate of return on assets for New York farms since 2000 was 6.1% with a great deal of variation both across farms and over years. One important consideration is that these are not random farm participants. Instead, these farms voluntarily participate in the program. The participants in University Farm Business Summaries (including Cornell's) tend to have larger milking herds and achieve above average financial performance. Thus, the average farm profitability of the general population would be expected to be below the figure values in a given year.

The long-run average of 6.1% ROA is not a level of profitability with which many industries would be comfortable realizing over long periods of time. This relatively low average profitability reflects the large dairy farm investments in land, facilities, machinery, and equipment on dairy farms. It is also important to recognize that this measure does.

Dairy farm financial performance has tended to have a "boom" or "bust" aspect for the last couple of decades, specifically and especially in the case of profitability.

So examining the New York farm returns from 2000 through 2022, 2007, 2014, and 2022 were profitable years, while 2009 and 2012 resulted in large losses. This is reflected in Figure 1 which is up on the screen here.

Using definitions that a "good" profit year was more than 25% above that average rate of return on assets, a "poor" profit year was more than 25% below, and then any returns within that band were "average," of the 23 years here included eight were "good" years, six were "average," and nine were "poor" years.

Of particular importance is that, since 2014, every year until 2022 was either "poor" or "average." Studying dairy farm financial resiliency makes it clear that "good" profitable years are necessary to recharge liquidity and solvency and ensure farm viability. The results reveal a tendency for margins and profitability to move back toward the average value as milk production and consumption react to demand or supply shocks.

The results in Figure 1 reveal that 2022 was the first "good" profit year since 2014. The seven-year period from 2015 through 2021 was difficult financially for dairy farms across the country.

At the current time, 2023 is forecasted to be a below average profitability year. The consequences and relationship between profitability and the other financial aspects including liquidity and solvency I'll discuss shortly.

Long-term examination of dairy farm financial performance reveals that milk sales provide the overwhelming majority of dairy farm revenue and is the major source of risk.

Another robust profitability result is that cost of production is the major driver in performance across farms. This research used 7,826 annual farm financial observations were available from 758 dairy farms in Wisconsin and Michigan. We can further divide rate of return on assets into operating profit margin ratio and asset turnover rate to examine drivers of profitability.

Operating profit margin measures the proportion of every dollar of sales that is kept by the farm as profit. Asset turnover measures farm efficiency generating sales using its assets.

The result is that operating -- that rate of return on assets equal operating profit margin times asset turnover. Dividing rate of return on assets in this manner helps to identify whether a farm is deficient at generating profit per dollar of sales, which would low operating profit margin, or sales per dollar of asset are low, which would be low asset turnover.

If the asset turnover is low, the farm is not generating enough sales for the amount of assets they're utilizing, which in general means the farm is overcapitalized. One solution in this case is to sell unproductive assets. If the operating profit margin is low, then the solution is to examine cost of production as these dairy farms are price-takers in the milk market.

Table 1 on the screen displays the summary statistics from Wisconsin and Michigan dairy farms from 2000 through 2016. The average profitability on these farms was 4.8% over that 17-year period. You can see that there was a wide range. The coefficient of variation was 1.51, which is quite high, on operating profit margin, where as asset turnover had a coefficient variation which is the mean divided by the standard deviation .49.

Similar to the New York farms, the rate of return on assets on Michigan and Wisconsin farms had a "boom" or "bust" pattern over the period considered. Asset turnover and operating profit margin were similar to rate of return on assets, which is not surprising as both are greatly affected by the farm milk price received.

The operating profit margin was very volatile throughout the period and was the primary driver of farm profitability. Not only did the average operating profit margin by year vary, but within year there was a large amount of variance and standard deviation across farms.

And Figure 2 displays for that period the operating -- the rate of return on assets is the solid line; the operating profit margin is the red dashed line; and asset turnover is the green line at the top.

So this would be a very similar pattern to the New York farms over the period considered. I just don't have the Wisconsin and Michigan farms for as many years on this.

The next aspect I want to talk about is financial risk.

Financial risk is defined as uncertainty about interest rates, willingness of lender to keep or put money into the business, ability to meet cash flow needs, and the market value of collateral. Financial resilience, then, is the ability to withstand events that impact firm income. Key thresholds depend on safety measures that are often determined by agricultural lenders as access to outside affordable capital is critical to commercial dairy farms.

To measure the financial risk and resilience, we used farm data from a balanced panel of 105 New York dairy farms from 2010 through 2019. There are many dimensions of financial condition that we look at when assessing financial risk and resilience.

Four area of the business I'm going to talk about today that lenders consider and should be benchmarked to assess the financial risk on farms: Solvency, liquidity, repayment capacity, and financial efficiency.

Across these four areas there are many different measures that might be utilized. I'm going to examine one measure for each, including debt coverage ratio, equity to asset ratio, current ratio, and operating expense ratio.

Solvency is the ability of the business to cover all liabilities if the farm business exits. Percent equity or equity to asset ratio, which is EA here, represents the portion of the assets on a market value basis that would be returned to the family after paying all liabilities.

The equity to asset ratio is calculated by dividing total net worth, or equity, by total assets from the market value balance sheet. The higher the equity to asset ratio, the less risk there would be for covering liabilities at the time of exit if that occurred. A larger equity to asset ratio indicates less risk of insolvency.

Lenders use equity to asset or a similar measure of net worth to assess insolvency risk and charge higher interest rates to farms above established risk thresholds. One common ag lender benchmark value is to maintain an equity to asset ratio above 0.5, with lower values indicating more risk.

Of course, farm operators might set their own target above that benchmark, particularly if they are risk averse. Similarly, lenders may tolerate lower equity to asset ratios if other measures such as debt, repayment capacity, or other key factors are judged to be exceptionally high.

Farm solvency measures are primarily driven by debt and asset values that are specific to farm investment and are more appropriately benchmarked to lender or industry standards than they are to other farms over time.

Liquidity is the ability of the business to meet financial commitments over the next 12 months. Liquidity refers to whether the business has the ability internally to absorb negative impacts that might occur.

If the current ratio is greater than one, then the farm has more current assets available than expected liabilities. Current ratio is calculated current assets divided by current liabilities.

If there are not sufficient current assets to cover the liabilities, the current liabilities, then the farm must either use off-farm income, sell longer-term assets, or borrow money. Therefore, higher current ratio values indicate less risk.

The safety threshold -- the critical safety threshold is 1.0, although lenders often become concerned if the current ratio is below 2. So lenders tend to want $2 of current assets for every dollar of current liabilities.

Repayment capacity is the ability of the business to service debt payments over the next 12 months. Repayment capacity considers whether there's sufficient or excess cash or earnings after expenses and family withdrawals to cover planned principal and interest payments.

The debt coverage ratio is based on earnings so it does not reflect cash that may have come in through other sources such as sale of capital assets or contributed capital. The higher the debt coverage ratio, the less risk the family has for meeting their debt payment obligations. The safety threshold for the debt coverage ratio for lenders is 1.15, or 115%.

So I've got the three measures up here. Similar to the profitability pattern, the data in Table 2 here reveal a pattern of farm financial risk that varies with milk price over the decade considered.

Solvency positions were relatively stable because they are based on longer-term asset and liability values. Although you can see in 2018 on these well-managed New

York dairy farms, that 20% of the farms were below the equity to asset threshold of .5%.

And what tends to happen here is that if you have low profitability years and you end up taking on more debt, then the equity to asset ratio will go down as the debt to asset ratio increases.

And you can clearly see that after some pretty -- so what this is -- and I should be clear -- this is the percent of the farms out of the 105 that were -- exceeded the threshold in a bad way. Okay. So the higher are these. That's the percent of the farms that would be endangered by these lender thresholds by these different measures.

Okay. So when it says 20% in 2018, that would be 20% of the farms that had equity to asset ratio of below the 50%.

Okay. And the first thing that happens in that case is that you end up paying a risk premium to borrow money, and the next thing that happens is that you don't have access to capital.

So it becomes -- and if we think about the interest rates that we're talking about, if they put a risk premium of 1 or 1.5% on these loans, that's a significant increase in the amount of interest expense on these farms.

Solvency positions were stable. During the poor years, the percent of farms below the danger thresholds for liquidity and debt repayment capacity spiked, indicating that these farms were at higher risk of financial default. In particular, the debt coverage ratio indicates that the majority of these well-managed New York dairy farms were experiencing high levels of financial risk in 2015 through 2018, basically without respite.

All lenders look at a portfolio of these measures and make decisions about what -- whether they are going to give the farms loans and, you know, what the interest rate is going to be.

In my experience, I have worked with several lenders on the risk rating. The debt coverage ratio and equity to asset ratio would be the two biggest measures there.

So when the debt coverage ratio indicates in 2018 that 70.5% of these farms were experiencing -- well, problems in their debt coverage ratio, that's pretty alarming. As, again, these are better-than-average-managed farms.

Finally, cost of production. Virtually all U.S. farm milk production can be characterized as a commodity in the sense that aside from some flexibility on quality components and perhaps volume premium, an individual farm has little control over the milk price received and essentially takes what the market is offering.

In a commodity market, the primary method to increase profit by dairy farmers involves lowering cost of production. Table 3 on the screen displays the average cost from New York dairy farms from 2013 through 2022, from the Cornell Dairy Farm Business Summary.

As these costs are per hundredweight of milk produced, they adjust for the quantities used and the gains in efficiency over time. For example, the price of labor has increased greatly in the past decade for these farms through market forces as well as the State of New York increasing minimum wage and instituting overtime rules during this period.

In response to increasing input prices, dairy farmers may have an ability to more efficiently utilize that input or perhaps substitute away. In the case of increased labor cost, farms may have been able to adopt new production technologies that can replace some of the hired labor. Even so, as the table displays, the cost of labor per hundredweight increased by 16% over that decade.

Most costs have increased steadily over the time period examined, even accounting for changes in technology and management. Total accrual costs adjust for changes in inventories, prepaid expenses, and accounts receivable and payable.

Total farm operating costs are estimated by deducting non-milk accrual receipts from the total accrual operating expenses, including expansion livestock purchased. These would be the operating costs that would have to be covered by the sale of milk only. Milk marketing costs including hauling costs more than doubled over the period examined.

The average gross milk price, revenue, and net farm income are also displayed in the table. But as they are primarily driven by the national farm milk price, they vary greatly depending on the market conditions. Consistent with the discussion above, in years such as 2015, 2016, and 2018, the net farm income realized was very low.

In summary, the farm milk price received is the primary determinant of farm profitability and farm financial resilience. Even the best-managed dairy farms struggle financially in years of low milk prices. Financial stress from low milk prices can cause dairy farm managers to exit the dairy industry, whether undertaking other ag enterprises or leaving farming entirely.

Large amounts of farm exits would have impacts on those families as well as their local communities. My hope would be for USDA to be cognizant of these aspects when considering the Federal Milk Marketing Order changes that might significantly impact farm milk price.

Thanks for the opportunity to testify.

DIRECT EXAMINATION

BY MS. HANCOCK:

Q. Thank you, Dr. Wolf.

While you have Table 3 up on the screen, I'm wondering if you could walk us through what's included in this table.

A. So -- well, this table has a number of different measures over the ten-year period. So total farm operating costs would be the cost that are not involved with financing of the farm, so primarily things on the dairy side, like feed, labor, fuel, marketing expenses, things of that nature.

And total accrual cost would then adjust for the inventories from year to year because -- so when we do the business summaries at the university, we follow Farm Financial Standards Council. I believe you had testimony last week maybe from a gentleman from an accounting firm, and they followed generally accepted accounting practices, GAAP. Most farms that do their own recordkeeping do not follow GAAP, they follow Farm Financial Standards Council. And they are similar in many ways, but Farm Financial Standards, we always value things at market price. GAAP is strictly cost.

But over time, if you are tracking this, if you think about, for example, a farm that was bought many years ago, the cost basis of the land is probably not very relevant to what the current land value is, for example, but under GAAP they stay at cost. The generally accepted accounting practices also handle some expenses differently, like deferred taxes and raised livestock.

And so in any event, when farmers do their recordkeeping, one of the fundamental reasons they keep the records is for taxes. Right? And with a few exceptions, most dairy farms are following cash accounting for their tax recordkeeping, and so we need to make accrual adjustments.

So the second line up there accounts for the fact that if you had a good year, probably going to have more prepaid expenses to end the year than you did to start the year, and things of that nature. And if you ignore that, you can -- well, you can see, on some of the years it makes quite a difference, and some of the years it doesn't make nearly as big a difference in what the expenses are.

So accrual adjustment is going to be ending value minus beginning value. So if it is bigger at the end, you know then it's going to be a deduction.

And then operating cost to produce milk are the direct costs that have to be covered by the farm, basically by the milk check, assuming that the other enterprises on the farm are break even.

So most dairy farms are primarily focused on the milking herd and the -- and the revenues and expenses around the milking herd, but sometimes they have a bigger crop set of enterprises and stuff. And in this case what that measure assumes is that the crop enterprise is a break even.

Now, over the long-term that's probably not a bad assumption. There's going to be some years where at $7 corn you might make money growing corn, but there's also going to be years at $4 corn where you are going to lose money growing corn. So that kind of assumes that's a wash.

And then you've got total cost to produce the milk then from these farms. And, you know, I've got a change at the end in the last column there, but honestly, a lot of these measures don't just go up. Right? They kind of vary depending on what kind of year it was.

The one that really jumps out is the milk marketing cost, which does not vary, in the sense that it is up the entire time that -- here.

And I -- the milk marketing cost includes hauling, primarily, but it also includes stop charges, fuel surcharges, co-op dues, CWT participation if they are in there, and any deductions from two-tier to over-base pricing system, and market adjustments. So basically everything that's related to milk marketing goes in that.

Q. Okay. So it's just isolated and limited to just the production of milk?

A. Yes.

Q. And that's why you said earlier that you have assumed net neutral effect based on any other crops that they might grow or --

A. Right. We're just trying to -- well -- so on these farms are going to be -- 85% or more of the revenues are going to be from the dairy enterprise. So that would be milk and cull cows and any other livestock sales and maybe earnings from co-ops. But -- you know, so the -- most of these farms have other enterprises, but they are in support of dairy enterprise. And that's where -- there are economies of size in milking cows and in specialization and managing. And managing the dairy herd, you know, is certainly full time.

Q. And this is based on the sampling of the -- of the -- of your dairy farms that you have included in your study, which I think you have said you would characterize as above average or larger more efficient operations?

A. Absolutely. On average, these -- these farms in this table on average are about a thousand cows. But there's a lot of variation. There are some smaller farms and some bigger farms in there. But they are -- yes, the -- the performance financially is going to be on the higher end of the distribution.

Q. And is it fair to say that the larger the herd size, the more you would expect to see efficiencies and greater profitability because of those efficiencies?

A. There are definitely economies of size in milking cows in the sense that the average cost curve declines as you spread the fixed costs from investing in milking facilities, barns, manure, and all this. It doesn't cost twice as much to build facilities for a 2,000-cow operation as it does for a 1,000-cow operation. So definitely there are economies of size there.

So, everything else equal, I would expect them to probably do better in that sense. But there is variation from farm to farm and from year to year, so certainly there are big farms that have bad years and small farms that have -- smaller herds that have good years.

Q. And, for example, if you were a smaller farm producing a premium product like an organic milk, you could have profitability margins that are far in excess just based on the higher sales price for your milk?

A. You could have.
Q. Okay. But you don't know?
A. You didn't in 2022.
Q. Okay.
A. Well, I -- there are -- there are organic farms in here, but they are not separated out. I would -- 2022 was not a good year for organic farms.
Q. Okay.
A. But that's -- that's -- but there are some in there, but we -- they are not separated out.
Q. Okay. And do you know what percentage of the farms that were included in your sampling that would be organic farms?
A. It would be about five.
Q. 5%?
And do you know, on average, what -- how they compare to the other conventional milk that's produced under your sampling?
A. Not consistently over time. I just know that last year was a bad year --
Q. Okay.
A. -- for organic farms, because even though the milk prices were high, the feed prices went up by a disproportionate amount for the organic farms in 2022.
(Court Reporter clarification.)
BY MS. HANCOCK:
Q. I think it is normal for our voices to kind of trail off at the end of the sentences, but sometimes that

means it is not audible for the court reporter.
On page 3 of your testimony, you provide a percentage of 6.1%. And as I understand it, that is what you are saying is the -- just the average rate of return on assets for -- I think this one is specifically for New York farms; is that right?
A. That is for New York farms, over a 23-year period, yes.
Q. Okay. And do you know how that compares to the average rate of return on assets for other farms in other areas as well?
A. So for other dairy farms?
Q. For other dairy farms outside of the New York area.
A. Well, not necessarily for that specific set of years. But the second part that I talked about with the operating profit margin and asset turnover, that was for Wisconsin and Michigan dairy farms. And I have worked with the Farm Business Summary data from Michigan and Wisconsin and New York, and the patterns are very similar. I would say that the Wisconsin and Michigan averages were in the same ballpark but a little bit lower. But that partly reflected more small farms, particularly in Wisconsin over that period.
Q. Okay. And so, again, just to reiterate, then, you can see some loss of efficiencies when you look at the smaller farms on their ability to gain that higher rate of return on their asset investment?

A. Yes. What you also see is that in -- so the way it has tended to work is you have got to make money in the good years so that you have the reserves to deal with the down years. And that's not just a dairy industry thing, but it is more of an agriculture thing. But it is definitely true in the dairy industry.

But what we see is that -- so -- is that all the small farms and the big farms tend to have about the same performance in the very poor years, but in the good years, the bigger herds do better, even adjusting for the size of the business.

Q. And you talked about how, I think, three out of 2020 -- I'm sorry -- three out of 22 years, these farms were profitable; is that right?

A. Well, I just measured there were -- it was eight out of 23 on the one. But I did point out three that were particularly high.

Q. Okay. And you said on page 3 from between 2000 and 2022, it was 2007, 2014, and 2022 were profitable.

A. Those were -- those were all much more profitable than the other years.

Q. Okay. And then you noted that the other years were either close to break even or losses?

A. Yes.

Q. And -- and so is your point there to say that there's a cumulative effect, that because there weren't those recovery years, it has taken a cumulative toll on dairy farms throughout that 22-year period?

A. Well, it definitely was true in the period from 2015 through 2019, 2020.
Q. And then 2022 you note was a profitable year, but 2023 tends to be trending back downward again?
A. 2023 is -- has very tight margins. So, you know, Dairy Margin Coverage Program will help some herds depending on their size. But, yeah, it -- the milk to feed price margin, which is very closely correlated with profitability, has been very low.
Q. And it also depends on whether a dairy farm participates in the program?
A. Absolutely.
Q. Okay. And so I want to just briefly cover the -- let's see which chart it was.
It is on your Table 2, and this is where you are looking at, at least, three of your measures of the farm's resiliency I think you described it as?
A. Yes.
Q. And I think what I understood you to say is that as -- as these -- as this cumulative pressure has continued to kind of mount, and one example was the DCR for 2018, where 70.5% --
A. Uh-huh.
Q. -- fell below threshold, that it actually will cost the dairy farms additional money just to operate.
A. Right. If you are -- if you are seen as high risk from the lenders' perspective, then -- then your cost of capital is going to be higher.

Q. And that would mean that if you are having that cumulative effect, you are looking for additional leverage opportunities to try and take loans out just to cover your operating expenses?
A. You might have to, yes.
Q. And then if you are seeing that cumulative additional pressure, just the cost of taking out those loans would go up if the lenders are seeing that this is a risky environment?
A. Correct.
Q. Okay. And then I think what you described as there are pay risk premiums, and then just sometimes there can just be lack of complete of access to capital if the lenders don't even want to lend them money based on these risk factors?
A. That would be correct. That would be a very bad sign for the liability record.
Q. And then when you are under the cost of production, you have a couple of time periods in here. I wanted to clarify which time periods we're talking about.
And you're referring to Table 3, which is the last table that we looked at, and you say, "The table displays the cost of labor per hundredweight increased 16% over the past decade."
That's that 2013 to 2022 timeframe?
A. That is correct. Yes.
Q. Okay. And then at the very end of the next paragraph, when you talk about there being more operating

costs that have to be covered by the sale of the milk, and that the milk marketing costs, including hauling costs, have more than doubled over that time period, is that that same time period?
A. Yes.
MS. HANCOCK: Your Honor, at this time we would make Dr. Wolf available for cross-examination.
THE COURT: Cross? Other than AMS I mean.

CROSS-EXAMINATION

BY MS. VULIN:
Q. Good morning, Dr. Wolf.
A. Good morning.
Q. My name is Ashley Vulin, and I'm an attorney for the Milk Innovation Group, a group of fluid milk processors.
I would like to start on page 2 of your testimony, please. And at the top of the page you have a list of four what I believe you describe as aims of Federal Milk Marketing Order; is that right?
A. Yeah.
Q. And the first one you say, "Orderly marketing activity; markets that function smoothly, predictably, and at a reasonable cost:
Do you see that?
A. Yes.
Q. Reasonable cost to whom: Farmers, processors, retailers, consumers? What did you mean there?
A. Well, I think it would have to be to the system.

So it would have to be to everybody.
Q. So the purpose of Federal Milk Marketing Order is to ensure all participants are paying a reasonable cost?
A. Yes. I -- yeah.
Q. Okay. And is that earning a reasonable cost for their product as well?
A. Well, it would have to work at all levels of the supply chain if it was going to be -- work efficiently. Yes.
Q. And what makes a cost reasonable?
A. Well, that the factors of production that are involved get a fair return.
Q. For every participant in the supply chain?
A. Well, in a market economy, if it's going to work, then, yes, it would need to work for all the participants.
Q. And then the next point you say "price stability."
Do you see that?
A. Uh-huh.
Q. And same question, for whom -- you know, where in the supply chain are you referring to for price stability?
A. Well, I think, in the original Act, I would have characterized it as being at the farm level.
Q. Still today, do you believe that the purpose of the Federal Milk Marketing Order is just to create price stability for farmers?
A. No. But I do -- that's -- but I do think maybe reducing uncertainty is an important part, which is why I have that parenthetically there.

Q. And do you believe price stability at other levels besides the farm level are important aims of Federal Milk Marketing Orders today?
A. I don't know that -- I mean, you would have to define stability in this case. I think reducing uncertainty is not a bad thing because excess uncertainty leads to inefficiency in the sense that investment doesn't happen, for example, when it maybe otherwise would. And -- and some variation would -- I mean, there's seasonality, for example, that is maybe not stable, but it's not unexpected. And so you would have to be maybe more specific there.
Q. Well, stability is your word, so I would use it however you used it in your testimony.
A. Right. But I'm saying that I think reduced -- that that means reducing uncertainty.
Q. And at all levels?
A. I mean, perhaps. It depends on what the trade-offs are. I mean, you know, there is always trade-offs, right? If there weren't trade-offs, this would be a trivial set of decisions, and we wouldn't need to spend a month and a half or whatever this is.
Q. That's optimistic.
A. Well --
Q. So number three you say "adequate and wholesome supplies of fluid milk."
Do you see that?
A. Yes.

Q. Do you mean supplies of fluid milk at the farmer level, supplies of fluid milk to consumers?
A. Well, I believe that the intention was to get it to the consumers. The farmers can only drink so much.
Q. I'm sure they do their best.
A. They do.
Q. And then the fourth point, "equitable returns to farmers."
Do you see that?
A. Yes.
Q. And so where in the FMMO statutes or regulations can we find that an aim of Federal Milk Marketing Orders is to ensure equitable returns to farmers?
A. I'd have to go back and look. I don't remember the 1937 Act. I don't know if it says that or if that was me characterizing it that way.
Q. Okay. So you are not sure if this is an actual aim or just a personal goal you think FMMOs should have?
A. No, I think that's a reasonable goal for the Federal Milk Marketing Orders to have, yes.
Q. That wasn't my question exactly. It was, you don't recall if this is actually an enumerated goal of FMMOs or if there is just a personal goal --
A. That is correct.
Q. Okay. If you could turn to Table 2 on page 4, please.
And if you wouldn't mind calling it up. Sometimes that can be useful.

A. Up there?
Q. Yes, please.
Sorry Figure -- Figure -- yes, Table 2.
A. This one?
Q. Yes. Thank you. Not on page 4 I'm seeing now.
A. Well, there's a single-spaced version and a double-spaced version of that, so it might be on different pages for different people.
Q. And actually I see now I did make -- intend to take you to page 2, but it's Figure 1. So that was my error.
A. This one?
Q. Yes. Thank you.
So here the red line is measuring the return on investment?
A. Rate of return on assets annually averaged across the farms who participated in that year.
(Court Reporter clarification.)
BY MS. VULIN:
Q. And is it a weighted average?
A. It is average across farms. So it is just every farm. So not weighted by cows and production if that's what you are asking.
Q. Yes, that was what I was asking.
A. Average across farms.
Q. And can you remind me again -- I'm sorry?
A. I was going to say, if you go read the reports, you can see that we break it further down by sizes and --

but I didn't do that here. So you can get into the reports, and there will be, for example, less than 300 cows, 300 to 600 and, you know, 600 plus, depending on the year, where those breaks are. So you can have it broken down, but this is averaged across all farms.
Q. And remind me again, the source of this data?
A. This is from the Cornell Dairy Farm Business Analysis --
Q. Okay.
A. -- project.
Q. And that data is gathered, is that through voluntary survey, a mandatory survey? How is that gathered?
A. This would -- it's not a survey. It's in person. So this would be farms that are cooperating with the extension educators that are part of Cornell Cooperative Extension and Pro Dairy Program. And so this is -- they sit down on an annual basis, and you get accrual adjusted, income statements, and balance sheets with market values, that then are checked for accuracy. And then -- then they would be part of this project.
And what the farms get out of it is they can benchmark their performance over time against other farms, and what we get out of it is the ability to have what I would call economic intelligence about what's going on in the farms to use for research and extension.
Q. Okay. So not all farms in New York participate in this study?

A. Absolutely not.
Q. It is -- the participants, it is an opt-in option?
A. That's correct.
Q. Or voluntary as we might call it?
A. Yes.
Q. But despite the fact that this study is the result of voluntary participation, you still think it is reliable?
A. Absolutely. And as I said, it's -- this would be indicative of better-managed farms. I'm not -- there absolutely is a selection bias here. These are the better-managed farms.
But what I would also say is if you are benchmarking performance, you want to benchmark against the better-managed ones. And we also -- so these are the means. We also will tell you what the 25th and 75th percentile is for a given year.
Q. What percentage of farms participate in the study?
A. Well, it varies a bit by year, because there are farms exiting. I mean, there are farms entering too, but that's less common. And there are farms that are growing over time here.
So this last year, it would have been 150-some farms out of, let's say, 3,000 in New York. So it's not a big percentage. It would be a much more significant percentage of the milk production, though, if we -- if you -- I mean, we could go through and do it. I can -- a thousand cows in milk production, we can figure out the

percentage of milk. So what is that, 5% of the farms, roughly?

Q. You are probably better at that than I am.

A. 5% of the farms, but it is going to be more like, you know, 20% of the milk or something of that nature. I -- but I could calculate that.

And in earlier years -- this is not the exact same set of farms. There's farm attrition over this time.

Q. And you had flagged I believe it was 2017, 2014, and 2022 as --

A. 2007.

Q. 2007, thank you.

A. Correct.

Q. And do you notice, do you get more farms participating in a good year than a bad year?

A. Not in -- not in this set. These -- these farms are -- most of these farms have been doing this for a very long period of time, and this is a standard part of their management practices. I -- I see where you are getting at. I think that there are -- there probably are -- everybody likes good news more than bad news, and so I could see how in some systems you might get more participation in the good years than the bad years. Of course, the bad years is actually when that information is probably more important.

Q. Uh-huh.

A. But these farms are -- you know, on average they have been doing this for a long period of time. In fact,

we just had one farm that I think they were -- did their 50th year in a row of this, so --
Q. But it also looks like in addition to 2007, 2014, and 2022, we have got 2004, 2001 it looks like, 2011, 2020.
A. Right. There were eight years that were profitable by my definition of being more than 25% above that, so they would have been in that, you know, 7.5% or more, eight years in that period. They were more frequent in the early years on this.
Q. And these are aggregated numbers, so you don't track if a farm is profitable over time compared to others or if the variation is felt uniformly across --
A. Oh.
Q. -- the industry?
A. We do. I don't have that here. I have -- we have a study that discusses how you should be benchmarking over time and calculate the transition probabilities of moving between profitable and unprofitable over time. But I didn't go into that here. But I can give you the reference. It's at the end of this testimony.
Q. Okay. Thank you.
And are the net benefits of risk management included in this calculation?
A. They are.
Q. And what about government payments to farmers, are those included in these calculation?
A. Yes.

Q. So the $2 billion in pandemic assistance is included here?
A. Correct.
Q. And does the farms' profitability also -- do you include their returns from plant assets or other cooperative assets?
A. Any returns from the co-ops are in there, also.
Q. So for farms that may own manufacturing plants, if there's underperformance due to Make Allowances from those plants, that could be impacting these numbers?
A. Yeah. I mean, that might be what is driving some of the increase in marketing costs in recent years, in some situations. That -- because that is where it would show up, the fact that it comes through the milk check, it would be in that -- in that marketing of cost increase.
Q. And do you calculate a cost of milk production annually as part of the study?
A. Yes.
Q. Is that included here?
A. It's in Table 3.
Q. All right.
A. Total cost to produce milk is right in the middle. I have got it -- it is a very busy table. I could even put more stuff on here.
But, right, so total cost to produce milk is in the middle of that table there.
Q. And I appreciate you turning to this. I had a few questions on this table as well.

So tracking these numbers over time, the top line is total farm operating costs; is that right?
A. Yes.
Q. And just so everyone has it, this is on page 13, the second to the last page of your testimony.
A. Yes.
Q. Okay. So I'm looking at these costs over time, and I look at 2013, it's $19.62. Then if we go to 2016, total operating costs go down to $17.31; is that right?
A. Correct.
Q. And then we'll jump to 2020. They are up to a little over $18. And then 2022, they are up to $22.53; is that right?
A. That is correct.
Q. Okay. And then I was comparing that to the total revenue, which is the second to the last line, which in 2013, at $24.70, is higher than it was in many of the years between that year and present, correct?
A. Yes.
Q. But then if we look at those same example years, in 2016, it goes down to 19.75, back up to 22.83 in 2020, and then a little over $30 in 2022?
A. Yes.
Q. So as I'm comparing these total farm operating costs and total revenue, they -- they shift over time somewhat in tandem, it seems.
A. Yes. That does happen.
Q. And so would you agree that as kind of revenue

fluctuates, the total farm operating costs also fluctuate in line with that?

A. To some extent. To some extent -- I mean, you are going to -- you are going to spend a little bit differently when you have got -- you can make investments that you wouldn't have otherwise made if you have extra money to spend.

Q. Thank you. That was kind of my next thought.

So how do farms manage costs of production in good years and in bad years? What kind of costs do they control?

A. Well, so are we talking operating costs or all costs?

Q. We'll do total operating costs.

A. So operating costs, so we're not thinking about doing long-term investments and things of that nature. You know, the -- one of the big drivers of the operating cost changes over time is -- is feed costs. So, for example, you were pointing out that the cost in 2016 was 17.31, and that was down from earlier years.

And if you look at the purchased grain cost, for example, you see how high purchased grain was in 2014 and how it -- you know, we came off of that $7 corn in 2014, because one solution to high commodity prices is high commodity prices. And then we plant, you know, 94 million acres of corn and bring the price back down. And so a large driver of that drop was just the purchased feed cost.

Q. What about other expenses, I'm thinking about kind of capital investment or things that aren't --
A. That wouldn't be operating costs. That would be in total costs, right?
(Court Reporter clarification.)
BY MS. VULIN:
Q. I said, moving beyond operating costs, what about other capital investment costs that could flow from either increased revenue or decreased revenue?
A. So what you tend to see is that when you have a good year is when you can make the investment, and because of the cash basis tax accounting and because of things like Section 179 and bonus depreciation, you can invest at the end of a good year.
So, you know, hopefully all dairy farms coming up in November are going to do a pretax estimate -- all farms, not just dairy farms -- will do a pretax estimate in November to figure out what their kind of tax liability might look like. And then if you have had a good year, then you think about maybe a new chopper or some other investment like that.
And so in a good year there will be more investment, and in the bad year, there will be less. So you can track things like depreciation and repairs. So on these farms, if it's not a good year, you will see relatively more repairs and relatively less tax depreciation, because they just didn't have the money to spend, so you have got to make due with what you have got.

Q. The concept being that you can kind of adjust expenses, or at least track them, as your revenue adjusts as well?
A. You have to. Family draw also adjusts. That's, you know, like the ultimate residual claim on the -- in the income on these farms.
Q. And you also said something earlier. You need to make money in the good years to cover you in the down years.
Do you recall that?
A. Yes.
Q. And so really looking at isolated years might not tell you the full story because you don't make money and only keep it in that one year, it would be spread out over time; isn't that right?
A. That's true.
Q. And you were asked some questions earlier about organic. You said that this analysis does include organic farms, correct?
A. There are some organic farms in this set, yes.
Q. And you --
A. They are not broken out separately. We don't have enough to do -- we would like to have enough to do a separate organic report. We're working on that. We do not have that.
Q. And you would agree with me that the costs to produce milk for organic milk are much higher than non-organic milk?

A. Yes.
Q. And did you include A2 milk in this study?
A. There might be one farm. I don't know.
Q. What about grass fed?
A. Well, there are certainly farmers utilizing pasture. You'd have to tell me where you think the threshold is. See, and -- so, yes. But not -- you know, I couldn't tell you how many or --
(Court Reporter clarification.)
THE WITNESS: No, there are lots of farms utilizing pasture in New York. We have good climate and water.
BY MS. VULIN:
Q. And you had said a figure earlier, 5%. Was that 5% of the farms in the study are organic or was that of milk in New York?
A. That would be in the study, 5%. There are -- I believe USDA's number is in the neighborhood of 500 organic dairy farms in New York, out of 3,000, 3200, was last number that I saw.
Q. And then if you could flip back to page 12, please, of your testimony.
I'm looking at your summary and conclusions. And your second to the last sentence, you say, "My hope would be for USDA to be cognizant of these aspects when considering Federal Milk Marketing Order changes that will significantly impact farm milk price.
Do you see that?

A. Yes.
Q. And when you say "these aspects," you are referring to farm profitability and financial impact of the proposals?
A. That is correct.
Q. Okay. And how -- what do you mean by "be cognizant"? Like, what specifically would you like USDA to do with this information?
A. Well, I think that you have got to look at the trade-offs. And I'm -- you know, I'm not telling them anything that they are not aware of. But, you know, they have got to consider what the trade-offs are on the different changes that they put in place.
Q. And what trade-offs are you recommending USDA make?
A. I'm not recommending any trade-offs. I mean, I -- look, again, there is -- there's no free lunch here. Any changes that are made are going to have positive aspects in some place and negative aspects in others. And so just be aware of those trade-offs.
Q. And can USDA be aware of the impact on farm prices yet still raise Make Allowances?
A. I assume they can. That would be up to them.
MS. VULIN: Nothing further. Thank you.
CROSS-EXAMINATION
BY MR. ROSENBAUM:
Q. Steve Rosenbaum for the International Dairy Foods Association.

Good morning.
A. Good morning.
Q. Are you -- as you may be aware, in this particular portion of the hearing, we are mainly focused upon Make Allowances.
Are you aware of that?
A. Correct. Yes.
Q. Now, are you aware that USDA historically has taken a sort of hardline view that farmer costs of producing milk are simply not a factor that they will consider in setting Make Allowances?
A. I was not aware of that.
Q. All right. Let me just -- could I -- if I -- let me just read a sentence to you when USDA was defending the 2008 Make Allowances, which were challenged. Quote: "It is, therefore" -- referring to things they've talked about already -- "it is, therefore, neither inappropriate nor surprising that, while USDA considers producer cost in fixing prices, it declined to modify the Make Allowances to account for these costs," end quote. All right?
A. Okay.
Q. And then let me -- let me read from the USDA decision in 2008, along the same lines, quote: "Opponents of increasing Make Allowances argue a number of points, that they are already set at too high level, that dairy farmer production costs also increased significantly due to higher energy and feed costs, that processors should look beyond asking dairy farmers to receive less for their

milk by charging more for manufactured products, and that Make Allowance increases should be made only when all dairy farmer production costs are captured in their milk pay price. These are not valid arguments for opposing how Make Allowances should be determined or what level Make Allowances need to be in the Class III and Class IV product pricing formulas.

"It is reasonable to conclude" -- I'm skipping down -- "it is reasonable to conclude that the Make Allowances used in the Class III and Class IV product price formulas should be updated to reflect changes in the costs manufacturers incur in producing cheese, butter, dry whey, and nonfat dry milk. It is necessary to reflect changes in manufacturing costs so that with the prevailing market prices for manufactured products, minimum Federal Order classified prices can be set," end quote.

Now, are you asking USDA to change any of those principles, if you will?

A. I'm not. No.

Q. Okay. And just to -- and then USDA also stated, getting to your point, quote: "In the aggregate, the costs of producing milk are reflected in the supply and demand conditions for the dairy products," end quote.

And they said, similarly, quote: "The costs of producing milk are in the aggregate reflected in supply and demand conditions that affect the NASS commodity prices of dairy products," NASS being the survey entity that surveys dairy product pricing.

So do you agree with me that -- do you agree with USDA that the costs of producing milk are in the aggregate reflected in the supply and demand conditions for finished dairy products, in a given -- supply and demand in a free market economy?
A. Well, I mean, if you are going to derive the farm milk price from a product price, then the way that it has been done is to subtract off the Make Allowance of manufacturing costs, and then the residual would be the farm milk price.
Q. And that, therefore -- and that the farmer costs of producing milk, and the rise or decline in that, over time, is going to be captured in the formula by the -- by the finished product pricing, correct?
A. It's going to be compensated that way. Long-term it might -- if you can't make it based on that, then you are going to have a long-term viability problem at the farm level. I -- so month to month I don't know that I would say that that is necessarily the market's fair return, but that's how it's compensated.
Q. Well, but obviously the farmers' willingness to produce the milk is going to be dependent upon being paid a price that will cause them to produce that milk, right?
A. Yes. Longer term. I mean, there's a lot of capital costs involved in here, so you are not going to jump in or out from month to month, which is part of the issue, I think, at the farm level because you need to make -- being a viable farming operation long-term means

making good long-term investment decision.
Q. And -- and of course -- and the Federal Order system, if you will, provides as follows, and I'll quote again from USDA's decision: "Dairy farmers face no regulatory minimums in their costs and face no regulated minimum payment obligations in the way that regulated handlers must pay dairy farmers for milk."
Correct? That's an accurate statement of the system, correct?
A. Yes.
Q. Okay. I mean, as opposed to processors who actually effectively are having their profits capped, right? They can never make more than the Make Allowance if they are making a commodity price -- of a commodity product, correct?
A. Are you assuming that they never get above the average price received?
Q. Well, I'm saying, on average -- let's assume the average price for cheddar cheese is $2, okay, and let's assume that the Make Allowance for cheese is $0.20, which it currently is.
Are you aware that if you are in the Federal Order system, and you are a processor, you have to pay your farmer 1.80 for the milk, correct?
A. Yes.
Q. And -- and if -- if you -- if the market improves and now you are able to sell your cheese for $2.10, you still only get to hang on to your $0.20 Make Allowance,

and now you have to pay $1.90 to your farmers as a minimum milk price.
Are you aware of that?
A. If you are always at the average.
Q. Yes. Well, obviously, we're using the average.
A. Well, if there is a distribution or maybe you could do things so that you received a price above the average.
Q. Well, and -- well, you have given a lot of average numbers, so I'm going to stick with my average numbers.
In -- viewed as a whole, the manufacturers of cheddar cheese who are part of the Federal Order system are capped in the amount of money they can make by the Make Allowance, correct?
A. Yeah. No.
Q. If they are making commodity cheddar cheese, they have to --
A. Only if -- only if they can't improve things to be above the average. I am using averages, but I'm also telling you there's a lot of variation behind those averages.
Q. In this context, doing better than average would mean that, what, you can make the cheese for less than the Make Allowance?
A. Perhaps, or you can sell the cheese for above the average price.
Q. But on average -- okay. You're -- you're focusing entirely then on non-average numbers as opposed to average

numbers?
A. You asked me whether you were capped at that.
Q. Okay.
A. And I said, no, there are other things you can control. You are not capped at that.
Q. The industry as a whole is capped at that, right? That's the whole purpose of Federal Order --
A. Well, again, I would have to know some more about the distributions and things of that nature.
Q. You mean distribution in the sense of, what, some people may get more and some people less?
A. The cost of production distribution and the revenue, the price distribution.
Q. Well, that's the whole issue here, obviously, is that we are in a situation where, in our view, and indeed National Milk agrees, the cost of production actually substantially exceeds the Make Allowance.
So assume that's the case and answer my question if you would, please.
A. So I'm an economist, and we argue about assumptions, and so I'd have to accept that assumption.
Q. Well --
A. I understand that's what makes economists a pain sometimes, but that's what we do. So you have to justify the assumption. And if I don't buy that assumption and your entire argument is based on that assumption, then, no.
Q. Okay. I will assure you that in this hearing

there will be much more than simply assumptions as to what the costs of production are for making cheddar cheese.
But if you would make that assumption for me, that the costs of production exceed $0.20, which is the current Make Allowance for cheddar cheese, then the processing side is sort of stuck, right?
A. Everything else equal, if they can't change it, then, yes, if they are willing to buy that set of assumptions.
Q. Okay. Now, Make Allowance is only one of several issues we're facing in these hearings.
Have you examined the proposals that address things other than Make Allowances to determine to what extent, if at all, your testimony is relevant to them?
A. Not -- not that I would be comfortable testifying about.
MR. ROSENBAUM: That's all I have. Thank you.
THE WITNESS: Yeah.

CROSS-EXAMINATION

BY DR. BOZIC:
Q. Good morning, Professor Wolf, Dr. Bozic.
A. Good morning, Dr. Bozic.
Q. I'll switch to Chris. It feels weird otherwise.
I want to first establish your -- your neutrality and expertise in this hearing.
Are you currently consulting for any party participating in this hearing?
A. I'm not.

Q. Does Cornell University have a preferred dairy policy?
A. Absolutely not.
Q. Do you have an ownership share in any dairy farm or dairy processing?
A. No.
Q. And you're tenured, right, so no job --
A. Right.
Q. -- insecurity?
A. That's what they tell me, yes.
Q. And is this likely to be your only appearance at this hearing?
A. Yes.
Q. Would you disagree with the statement that Baker chair is the most prestigious academic position specializing in dairy markets and policy?
A. Would I disagree? You might be N of one, so -- I mean, you know, it might be the most and the least. I mean --
Q. Where I'm going with this is that when -- when the administrative law judge swears us in, he's asking us to affirm that we'll be speaking truth and nothing but the truth, but not the whole truth, and you are one of the few people that we can hope to hear the whole truth here, so that's why this preamble set of questions.
I want to run down the topics of the hearing and examine their influence on farm finances.
So the first topic of the hearing is the standard

milk composition.
Based on your research what would you anticipate the increase in standard milk tests to be on producer price differentials?
A. Sorry, ask that again?
Q. I'm checking whether you read the paper that we wrote together.
A. Producer price differentials.
Q. Yeah.
A. Oh, okay. Sorry. I didn't understand. I didn't understand you were talking about the PPD.
Q. Yeah.
A. So -- well, one of the things that has eroded the producer price differential over time, since multiple component pricing started, was the increasing component values because everything gets paid at Class III components first and there's less left to go into the PPD.
Q. Would it be fair to say that the standard milk tests are increased the net farm profit would benefit from?
A. I haven't analyzed that formally, but it seems like the likely outcome.
Q. Thank you.
And moving on to the second topic of the hearing on milk surveys, and particularly on removal of barrels.
And if the block-barrel spread inverts, meaning that barrels get priced higher than blocks, due to additional block capacity -- again, if that happens --

what would be the impact of removing barrels on that farm profit?
A. So if you remove the -- so the proposal to remove barrels from calculating Class III?
Q. Right. But under the assumption -- I'm here to sell a set of assumptions, since you are buying.
If -- so under the scenario where the block-barrel spread inverts due to additional block capacity, what would be the impact of removing barrels on the net farm profit?
A. If it inverts, so that we now have barrels above blocks?
Q. That's correct. Yes.
A. Well, then that would have a negative effect if that were to happen.
Q. Yeah. Thank you very much.
I'm going to move on to the topic number three on Make Allowances, and I'm going to cite from the final decision published on April 2nd, 1999. I'm not going to ask you to affirm that that's the case because I don't have it printed, so, you know -- so in that final decision on page 16,097, so 1-6-0-9-7, USDA writes:
"If the Make Allowances are established at too low a level, manufacturers will fail to invest in plants and equipment, and reduced production capacity will result. If the Make Allowances are established at too high a level, there will be unwarranted incentive to increase capacity above the needs of the industry, leading to

overcapacity, resulting losses to manufacturers.
        "Either scenario would not be in the best interest of the dairy industry. Manufacturing dairy plants who find the level of Make Allowances inadequate compared to their actual costs also have the alternative to not participate in the Federal Order marketwide pool."
        So I'm going to go back to the first sentence that if the Make Allowances are established too low, manufacturers will fail to invest in plants, reduced production capacity will result.
        To your knowledge, are we now net importers of a higher share of the cheese consumed in the United States than we were maybe ten years ago?
    A.   I believe we're not higher importers.
    Q.   In your opinion, are real price -- real prices corrected for inflation -- are real prices for manufactured dairy products increased since the last time where Make Allowances were adjusted, so let's say 2009?
    A.   Are you talking about retail prices, wholesale -- I guess it doesn't matter. Retail, wholesale?
    Q.   Yes.
    A.   I -- I have -- off the top of my head, I would guess that they have not exceeded the rate of inflation, so --
    Q.   In your opinion, over the past decade, has the domestic supply of dairy products successfully met the domestic demand for dairy products?
    A.   Has the domestic supply met the domestic demand?

Q. Yes.
A. Yes.
Q. And when we talk about the adequate investment, in your opinion, should that refer to -- should that be measured against the producer's desire to grow their farm production or against market stability to absorb dairy products?
A. Say that again --
Q. Yes.
A. -- please?
Q. When the -- it -- a lot of speakers before me, and probably some after me, will talk about the adequate investment -- the characterization will be whether the investment is adequate or inadequate.
And how should one measure the adequacy? Should it be measured against the producer's desire to grow their production of raw milk or against market's ability to absorb the increase supply of dairy products?
A. Well, if we were picking one of the two, it would probably be the latter, but at some point you would have to consider both.
Q. Yeah. In your opinion, has the dairy policy since 2009 distorted location of new dairy plants? In other words, would free market result in plants that have been built or are currently under construction, would free market result in plants be located in different locations than where we are observing them over the last 15 years?
A. I don't think I can answer that.

Q. What information would you need to be able to?
A. Well, I think there's a lot of concern about, you know, for a lot of areas that have -- like, so the Northeast where I live, that there's been -- as the speaker before me was talking about, you know, finding a home for some of the milk, and the market adjustments that come out of that, that also was happening pretty frequently for a period of time in the Mideast and Michigan. And so there's certainly lots of interest in who is investing and where, but I -- I don't know that I have enough information to -- to -- to say whether I think actually the policy was driving those location decisions. Certainly may have on the margin, but I don't know that.
Q. Thank you for your answer.
So going back to the final decision from '99, the USDA contemplates the phrases "too low" and "too high." And I was wondering if you would be willing to comment on the distortions that would -- you know, which one would be sort of more severe, setting the Make Allowances too low or setting the Make Allowances too high.
A. I suppose that that depends very much on where you are sitting, right? So the -- I mean, this is -- I think that what you read reflects the fact that USDA was being very aware of the fact that there are trade-offs, right? And that if you set them -- if they are too low, then there's going to be issues, like what we talked about, underinvestment possibly of manufacturing capacity, in reblends on some of those manufacturing losses that go

right into the farm milk checks and stuff. So clearly, you know, that's something that would not be great.

If they were too high, as that opinion that you -- or whatever it was that you just read noted, right? You wouldn't want manufacturing built just to take advantage of economies of size and -- I'm not saying this would happen, but you would have to be careful about -- about that.

And, you know, a lot of the -- what I have heard in this hearing and what is being suggested is to get a good handle on what the manufacturing costs look like and the manufacturing cost distribution, and then, you know, the neutral referee has to decide where in that distribution this should be set and trading those kind of factors off.

Q. Thank you for your answer.

I'm reading the -- from the Proposal 7 as noticed by USDA, and in the exhibit, I believe USDA 1. And it's listed there that the Make Allowance for cheddar cheese would increase from \$0.2003 to \$0.24 per request from National Milk.

In the Exhibit IDFA-1, on page 14 -- I'm not sure whether we need to provide it to the witness -- on the page 14 on Exhibit IDFA-1, which is Dr. Stephenson's study, the reported total cost for the low cost plants for cheddar cheese is \$0.22, \$0.2201.

Is there a risk that even National Milk's proposal could potentially set the Make Allowance too high for

cheese given the results of Dr. Stephenson's study?
A. So in Dr. Stephenson's study, there was a low -- he divided the costs further into a low cost group and a high cost group; is that -- I have read it, but I don't have it in front of me.
Q. That's my understanding.
A. Okay. Well, I mean, to the extent that there is a distribution in that there is, for example, economies of size in producing some of these things that get surveyed, you know, there are potentially firms that are going to do better out of it and firms that are going to do worse, right? So, you know, it's conceivable that it could be too high. I mean, it depends on what you mean by "too high," right? We could have a long discussion or argument about that.
Q. If we set the Make Allowances $0.02 higher than is needed to provide normal returns on efficient cheese plants, could that encourage further investment in cheese capacity where none is warranted by the market demand?
A. Possibly.
Q. Thank you for your answer.
To your knowledge, does the weekly National Dairy Products Sales Report capture all of the cheddar cheese produced?
A. I don't believe it does.
Q. Okay. And if sellers of cheddar cheese are not subject to NDPSR, for example, because they forward price or they have lower fat or high moisture, etcetera, could

they compensate for outdated Make Allowances by increasing the basis over the NDPSR or increasing the basis over CME?
A. Is it possible? I -- I suppose. I don't know. I haven't looked at it.
Q. Yeah, yeah. I'm not asking whether it is actually happening. We don't have that information.
A. Right.
Q. But I --
A. Well, I mean, part of the problem -- not to be pedantic -- but if the question is, is it possible, probably yes.
Q. Yeah. And the reason I'm asking is because the argument is often about circularity, that you cannot increase the price that you are charging to your customers because that would be captured by NDPSR.
A. Right.
Q. But to the extent that NDPSR may not capture all of the cheddar, then that argument also is limited.
Could mozzarella sellers do the same given that mozzarella is not part of the NDPSR? If the Make Allowances are outdated, could mozzarella sellers compensate for that by increasing the basis versus the 40-pound block that they use as their base?
A. Presumably they could if they didn't have to worry about outside --
Q. Competition?
A. -- imports or some other type of competition.
Q. Sure. Sure. Sure.

Moving -- thank you for the answer on that.
In -- in your understanding, how has the whey market evolved over the last 20 years?
A. Well, I'm not an expert on the whey market. I would say that there is -- my sense of it is that there is less, for example, dry whey and more -- more innovative products like whey protein concentrates, whey protein isolates, and things of that nature. But I'm old enough to remember when we fed the whey to the heifers, so --
Q. Given that -- if that is indeed the case, that a larger share of liquid whey is dried into higher protein powder, whey protein concentrates or isolates, would it be irrational to infer that profitability is higher in making WPC rather than dry whey?
A. Well, presumably, if more firms are moving into that, they are doing it because there's an economic incentive.
Q. So if that is indeed the case, then if the Make Allowance is set to return normal returns on the efficient plants that make dry whey, could they still -- could that number still provide for extraordinary profits to produce WPC or the isolates?
A. I suppose it could. That would be maybe returns to innovation.
Q. Yeah. But to the extent that the standard plant being built is no longer dry whey plus cheddar, but isolates or concentrates versus cheddar, that's presumably something that should be taken into consideration?

A. One of the interesting things about the dairy industry, as well as the more difficult things, is the variation in the vintage of the production and the size of the production and the different commodity -- you know, the portfolios the different firms have, certainly. And the Federal Milk Marketing Orders have to kind of necessarily simplify, right? You can't get everything in there.

Q. Sure. Yeah.

I'm going to switch a little bit to the risk management. And are you familiar with the efficient market hypothesis?

A. Yes.

Q. For -- for those in the room that are not geeks like you and I, could you please explain it in simple words?

A. Well, I don't know if I want to do that right now, but go ahead. You go ahead. I mean, where are you going with this, Marin? I'm a little concerned about where we're going with this set of questions.

Q. I'm about to sell you a set of assumptions.

A. Oh, okay. You are going to test the assumption of the efficient market hypothesis?

Q. So would it be fair to summarize the efficient market hypothesis that any predictable change in the market would be priced in the futures price?

A. If markets are efficient, then they will be pricing that --

Q. Yes.
A. -- correctly, yes.
Q. So -- so --
A. But in the real world, right, sometimes not. But -- but go ahead, yes.
Q. So -- so, in other words, if the only two proposals regarding Make Allowances are IDFA and National Milk, would it -- would the economic theory suggest that the futures markets would have to price in as the final result some sort of weighted probability between those two proposals? In the futures markets I mean.
A. Right. So assuming that there's not a market failure there, the participants in the futures markets are probably paying attention to this decision, to the extent that it makes changes on the margin. And, yes, in the same sense that there's a whole literature in economics that suggests that it's not news if the markets already knew it.
Q. Right.
A. Right? So if the Federal Reserve comes out and announces that there will not be an increase in the interest rate and the markets don't react, then the assumption is that the markets had already priced that in.
Is that where you are going with this?
Q. My next question is where I'm going. So if the Make Allowances are indeed priced in the futures as a weighted average between National Milk and IDFA, and if AMS announces the Make Allowances as National Milk has,

would then that lead to hedging gains or hedging losses for producers that have short positions in 2025 futures contracts?
A. So they have taken the sell position?
Q. Yes.
A. And it -- they announce at where?
Q. So the market prices it in as the weighted average between National Milk and IDFA, and AMS announces it at National Milk's numbers.
A. So they announce it at a lower number?
Q. That's correct.
A. Oh. So then the farm milk price ends up being higher?
Q. That's correct.
A. So they end up -- so they sold, so they have to buy back?
Q. Yes.
A. So then they're going to take a loss?
Q. So in other words, like hedging -- regulatory uncertainty could actually lead to hedging losses, even if -- if National Milk gets their way?
A. In that example.
Q. In that example. Yes. Thank you much for that clarification.
So the next question is a little bit more open ended, but I would be remiss not to ask because I get asked this a lot by dairy farmers. And farmers ask, well, where is my Make Allowance? What makes it fair -- I'm

paraphrasing -- what makes it fair to ensure processors get risk-free profits but farmers must go out of business if there's too much product that depresses the milk prices?

So how -- how do you go about explaining to dairy farmers that processors get risk-free profit, but producers get to bear the risk?

A. Well, I guess, first of all, if we were thinking about the discussion that I had with Mr. Rosenbaum a minute ago, he would -- to be consistent, I would probably have to say that they don't necessarily get risk-free --

Q. But --

A. -- gains there.

Q. -- but those are the costs of processing that are below Make Allowances, they would get risk-free profits, assuming there are no over-order premiums?

A. Right -- well, I mean, by the efficient margin hypothesis, if they were generating exceptional returns, we would expect it to get -- to be spent somewhere, right? So, yeah, that's maybe where over-order premiums would come in in your example, or something of that nature.

Q. Or more capacity?

A. Or more capacity, or some other expenditure that way.

You know, when you start with product prices and then work backwards to the farm, it's -- I think -- I was asked about the cost of production earlier, right? And -- I mean, part of the -- so, yes, the farms end up as kind of the residual claimant on that difference. Of course, keeping in mind that it gets blended and there are components and over-order premiums, hopefully, and some other things like that.

Q. I want to -- thank you for your answer.

I want to move on to the topic of base Class I mover, topic four in this hearing, and how it relates to your area of expertise in risk management and farm finances.

Would you say that complexity of milk pricing is one of the factors keeping utilization of risk management by dairy farmers from being even higher?

A. I would say it's the primary one. We have a paper from about -- well, from 2014 now, where we surveyed a thousand -- I can't remember how many dairy farmers -- across the country, and the ones that did not use risk management -- and I would assume that this is still true today -- the primary impediment to it was understanding -- well, and management time, which really goes together. If you had more management time, you could spend more time understanding.

Q. Okay. Do the existence of advanced pricing make risk management by dairy farmers easier to execute or more complicated?

A. Everything else equal, advanced pricing probably makes it -- probably gives you a little more basis risk.

Q. But basis risk for those that are not experts means more complicated?

A. More complicated, yes.
Q. So would it follow that abolishing advanced pricing would make risk management by dairy farmers more straightforward?
A. Yeah, it might, but there might be a trade-off there that we're not considering at the moment.
Q. Does any come to mind? From a dairy farmer perspective.
A. Strictly from a farmer perspective? No. Except for the extent that they might be in the co-op, that it would make it more difficult and shows up through the co-op activities.
Q. Okay. So are you familiar with the theory of storage and the impact that storage has on dynamics of commodity prices?
A. I am but --
Q. You did study in Davis --
A. I did, but that was a long time ago, and I haven't looked -- you know, on a farm, we don't concern ourselves with storage a whole lot, on dairy products.
Q. Well, I'll chart the path where I'm going --
A. I have read Brian Wright's stuff, but I wouldn't want to be quizzed on it right now.
Q. I can commit to that.
So which product is more storable, cheddar cheese or nonfat dry milk powder?
A. Nonfat dry milk powder.
Q. And which plants are --

A. Although, I mean, you know, I have had like 20-year-old aged cheddar, and it is pretty good.
Q. Let me clarify. Which product is storable without altering its functionality or -- or --
A. Okay.
Q. Powder, right?
A. Yes.
Q. Okay. Which plants are typically used for balancing, would it be cheese plants or powder plants?
A. I would expect powder plants to be used for balancing more often.
Q. So given what we know about storability and excess capacity, which means balancing, which product is theoretically more likely to be subject to explosive growth in prices, would it be Class III price or Class IV price?
If something happens in the market and prices have to react by increasing, which one is more likely to have an explosive, more dramatic increase?
A. Class III.
Q. Class III? Yeah.
And I believe you said before that 2014 and 2022 were among the most profitable years for dairy farmers?
A. That is correct.
Q. Do you recall which class price was higher in those two years?
A. Class IV was higher in 2022. It was higher in 2014 also, I believe.

Q. Yes. That's my recollection as well. Okay.
Well, so that's -- all things considered, given what you have answered before about the exclusivity of Class III versus Class IV, if the spread between III and IV were to widen suddenly, widen meaning that it is not -- they are not close, they are apart -- is it more likely to be in favor of Class III or Class IV?
A. Well, I would think if it's explosive, it would be Class III.
Q. It would be in favor of Class III. Okay. Great.
Is there anything else that we have not asked anybody in the audience that would point to some important trade-offs that -- and I know you are not here to recommend, do this, not that. But, like, is there anything else that you would like on the record in terms of trade-offs, trade-offs that are relevant in decision-making on topics in the scope of this hearing?
A. No.
Q. Okay.
DR. BOZIC: Thank you very much.
THE WITNESS: You're welcome.
THE COURT: We have been going for about an hour and 20 minutes. Should we have a ten-minute break?
Let's come back at 11:10 a.m.
(Whereupon, a break was taken.)
THE COURT: Back on the record.
Do we have further cross-examination for Witness Wolf, when we gets back up here?

CROSS-EXAMINATION

BY MR. MILTNER:

Q. Ryan Miltner representing Select Milk Producers.

Good morning.

A. Good morning.

Q. On page 2 of your statement you listed four goals of the Federal Orders, and I think Ms. Vulin had some questions on those.

A. Uh-huh.

Q. The last one is about equitable returns to farmers. A court reviewing one of the last hearings on Make Allowances quoted some authority, and it said that "USDA regulates milk prices in order to advance market stability, supply adequacy, milk cost equity between handlers, and milk price equity between producers."

Would that be the type of topic you were referring to there?

A. Yes.

Q. Okay. So in my experience dealing with farms, a lot of them have three separate financing tools that they utilize: Like a facility loan, a cow loan, and an operating loan.

Is that similar to the financing structure you might find for the farms that you survey for your reports?

A. It would be similar.

Q. Given the ups and downs that you cite in terms of farm profitability, do you do any analysis to determine whether the line of credit, the operating line, for

instance, is sufficient to ride out those variations in profitability?
A. That's a good question. That would be one of the things that was being stressed during that four- or five-year period from 2015 through 2019 with multiple years of low loans. Because, generally, right, an operating loan by definition is, you take it out and you -- it's a current loan, and you pay it back that year. And so if you -- during that period there would have been some of those farms, if they couldn't pay it back, would have rolled it into longer-term loans. And, of course, the cost of doing that today would be a lot higher than it was during that period when we had very low interest rates.
Q. In the absence of their ability to ride out those longer-term, I guess medium-term perhaps, price depressions, is that where the farms would then need to dip into equity or look at other means to maintain their existence?
A. Well, yes. And what we see is sometimes there are one-time things that farms can do, like nobody has logged the back 40 since, you know, great grandpa, but you only get to do that once -- well, for a while then, you know -- so some -- what we see with these farms is doing -- sometimes having one-off things that they can do. The problem is if you have to get into a situation where you have to sell productive assets, intermediate or long-term assets, that that's affecting the viability of your farm.

Q. Is that something that you see occurring with farms in New York, that they have tapped into selling some of those assets in order to maintain their viability?

A. It does happen, but sometimes that's happening as the last thing that they do before an involuntary type of exit. And when we're working with farms, we would prefer that if they were exiting, they did so voluntarily, preserving equity. Because, in general, for these farm families, the equity they have in the farm business is their retirement plan.

Q. On page 3 of your testimony, you're talking about the rate of return on assets at 6.1%, and you note that "the long-run average of 6.1% ROA is not a level of profitability with which many industries in the general economy would be comfortable realizing over long periods of time."

In terms of just the farm community, do you have a benchmark that you like to have farms realize over a long period of time?

A. It kind of depends on what's acceptable to the owner-operator, right, as the residual claimant. I mean, part of what we have is if they are doing this for a long period of time, then what the returns -- so if we're thinking specifically about the farmer, we could look at rate of return on equity, which is related to but different than rate of return on assets here, and the question would be what's a sufficient rate of return on equity to keep the business assets invested there. And

part of what we would have -- an economist would assert is that if they are doing it for a long period of time, then it must be an okay return. Right?
        But you also have some asset fixity from management and -- well, you know, tradition and other things like that, that maybe you are considering other factors beyond whether it's a fair return.
    Q.   On page 5 of your testimony -- and you may want to look at this because I have a question about what was written out there.
    A.   Okay.
    Q.   It's about two-thirds of the way down after you set out your formulas. And it reads, "The result is that OPM equals OPM" --
    A.   Oh, yeah, that was a -- yeah, sorry. That was a typo. It should say ROA equal OPM times ATO.
    Q.   That's what I figured because --
    A.   I noticed that when I was reading it --
    Q.   I did that --
        (Court Reporter clarification.)
BY MR. MILTNER:
    Q.   Because if I do that -- if I look at that formula, then the value of farm production cancels out, right, and then that takes us back to the formula you had on the previous page. Okay.
        Then on page 10, and you show these various measures over a ten-year period. My question is: Do you track any of the farms here longitudinally throughout that

period?
A. Not here, no. Do we? Yes, in the sense that the individual farms that are participating are getting their numbers and then, you know, track them against the -- their peer farms.
Q. And Table 2 sets out those that I -- you say were at a higher risk of financial default.
A. Uh-huh.
Q. Do you know if, for instance, the 21.9% of farms in 2010 there, how many of those are the same farms that appear in 2011? In other words -- well, do you know that answer?
A. Off the top of my head, no, but they would be highly correlated.
Q. Okay. So a farm that would start showing financial default -- or risk -- higher risk of financial default, do you find that those farms improve over time and some exit, or once they reach a higher risk of financial default, are they kind of on a glide path to going out of business?
A. It depends on what's causing that. Sometimes there are management factors that can be -- that you can use to address those type of issues and -- and get yourself back on firmer financial footing, and sometimes there are not. I mean, it depends -- sometimes there is, you know, something structural about the way the farm is operating that's harder to address.
The way I use Table 2 is to -- is -- is to help

farms look where their financial resiliency measures are relative to these thresholds and advise them that as you get closer to those thresholds, it is more important that you think about risk management, which might be something like a Dairy Margin Coverage or a Dairy Revenue Protection, but might not be. And it doesn't tell you what you should do, but it does tell you when you should be paying attention to that.
Q. Were you here this morning for our first witness from Agri-Mark?
A. I was.
Q. Okay. And then he had testified about the market adjustment that is made to Agri-Mark producer checks.
And I think when you were explaining Table 3, on page 13, that those types of market adjustments would show up in your row of milk marketing costs; is that correct?
A. That is correct.
Q. And also what would show up in there would be an assessment for an over-base program as the Agri-Mark witness had talked about, correct?
A. That is correct.
Q. So you noted I think that the bulk of that cost is hauling, which --
A. Yes.
Q. -- has gone up quite a bit, correct?
A. It has.
Q. 100% as you note -- or I shouldn't say that. The milk marketing cost is up 100%, correct?

A. Correct.
Q. But the bulk of that total cost is hauling?
A. Yes.
Q. Okay. So I have four things that I think have been identified as making up that milk marketing cost: The hauling, market adjustments, over-base programs, and cooperative dues -- oh, and CWT assessments if they are participating?
A. CWT, stop charges.
Q. Okay.
A. Fuel surcharges. You got the over-base. You got the market adjustments. Yes.
Q. So fuel surcharges, would those be fuel surcharges on hauling?
A. Correct.
Q. Okay. How common are stop charges in New York?
A. I don't think they are very common, but they do occur sometimes.
Q. Right.
A. Yes. And so in this set we have -- these farms are from a number of different -- are shipping to a number of different places. Some are, you know, co-op members, some are not. Most are co-op members, but they are going different places. And the different co-ops would have different programs that are affected here.
Q. Thank you.
I really wanted to keep all of my questions to farm costs, but there were a few questions asked of you

about hypotheticals, and I wanted to follow up on one of them. And I hope it won't take very long. So here's my setup. And you can let me know if you can agree with my assumptions for purposes of our Q&A.

I want you to assume there's a cheese plant that sells only -- that manufactures and sells only commodity 40-pound cheddar blocks. And those sales are made at the exact price reported to NDPSR, or announced by NDPSR, and that the plant buys all of its milk at exactly the Class III price, and that plant's manufacturing costs are higher than the Make Allowance assumptions in the current formulas.

That plant would probably lose money, wouldn't it?

A. If the Make Allowance is a fair reflection of their cost, yes.

Q. Now, the Make Allowance assumes a return on investment, so it -- I guess it might be that they could make money, just not make a high -- as high a return on investment as assumed by the formula.

Would you agree with that?

A. Yes.

Q. Okay. So now I want to change a couple of those assumptions.

Let's assume that plant makes an aged cheddar that is sold at retail to consumers.

Would we be able to draw the same conclusions about that plant's profitability?

A. I wouldn't think so.

Q. If that plant -- let's assume we're back to selling just 40-pound cheddar blocks, but that that plant is able to consistently sell its cheese for a price higher than that reported by NDPSR.

We couldn't draw the same conclusions about that plant's profitability, could we?

A. No.

Q. And now let's assume that it's still 40-pound blocks, still being sold at the announced NDPSR price, but now, for whatever reason, that plant is able to buy its milk for less than Class III, whether it's through a discount, through over-base assessments, or it's a non-pool plant.

We cannot make that same conclusion about the plant's profitability, can we?

A. No.

MR. MILTNER: Okay. Thank you. That's all I have.

THE COURT: Further cross other than AMS?

CROSS-EXAMINATION

BY MS. VULIN:

Q. Hello. I just wanted to follow up on the 6.1% return on asset issue that Mr. Miltner raised.

Would you mind pulling that table back up for us? I guess it is Figure 1, please.

I worry there was a lack of precision, probably on my part, in our first discussion, so I just want to clarify a few things.

So the 6.1%, is it return on asset that --
A. Correct.
Q. -- is that the term? Okay.
The 6.1%, that is that bolded line --
A. Yep.
Q. -- you have here?
A. That is the whatever color green, black, whatever color that is, that goes above 5% there.
Q. So your Y-axis percentage here is the rate of return, correct?
A. Yes.
Q. And the zero there that we see, that line is, you know, largely below most of your graph, correct?
I can phrase that much better.
The rate of return on assets only dips below zero for one year, correct?
A. Yes.
Q. And that was it looks like 2009 during the recession?
A. Yes.
Q. So other than that one year, the average return on investment -- or return on assets was positive for the entire period?
A. Yes.
Q. Okay. It's just that at certain times it dipped below what you believe the optimal or minimum of 6.1%?
A. Well, it -- I mean, that was the average, so, yes, it was below that. You know, I don't know how these --

well, these are distributed reasonably normally, actually, over time.

But if -- you know, if you look at, for example, 2002 and 2003, you know, that was on the order of 1% each of those years, and that's returns to all of the unpaid factors, including unpaid labor, management, and capital. So, you know, when -- even at 6%, most firms are not going to be super happy with that kind of return.

Q. And are you aware from the real world there are any problems -- in your experience are dairy farmers experiencing problems with obtaining loans because of what you believe is lower return on assets?

A. Well, the rate of return on assets would be correlated with some of the other measures that I talked about, although not perfectly. Lower rate of return on assets would be one of the factors that the lenders would consider. And so in -- so it's possible. It depends on the situation. And -- and as I said, the first thing that happens is you are borrowed capital gets more expensive.

Q. But have you seen that happen?

A. Yes.

Q. In terms of obtaining loans?

A. Yes.

MS. VULIN: Thank you. No further questions.

THE COURT: Further cross other than AMS?

Seeing none.

MS. TAYLOR: We're having a separate question, and I missed whatever --

THE COURT: You didn't miss a thing.

CROSS-EXAMINATION

BY MS. TAYLOR:

Q. Good morning.

A. Good morning.

Q. Thank you for coming to testify today.

A couple of questions, I'll try to get through the weeds first, and then ask for big picture questions.

So on page 2 of your statement, under dairy farm profitability, you define ROA as operating profit divided by total farm asset value, but the equation says average farm asset value. I'm wondering if that is the same or --

A. It is the same. It's meant to be average total farm because, typically -- okay. So asset value, like any wealth measure is, is a snapshot at a point in time. And typically with these farms we have beginning asset value, from the beginning balance sheet, and an ending one. If you had other ones throughout the year, you would average them over that. So usually it is a beginning plus ending divided by two to get average. And only the farm assets, not -- not the house, not the car, not -- so we're trying to figure out how the farm business is performing.

Q. Okay. Thank you.

And the talk of the 6.1% ROA, and you say it's not level of profitability, which many industries would be comfortable with. And I know you had a previous question about, well, what would be comfortable for dairy, and it depends is basically, I think, what your answer was.

But taking it a further step back, other industries, you know, what -- what are their benchmark ROAs?
A. 12 to 15.
Q. Okay.
A. I mean, you know, like -- but part of it is just how much capital is required to be a farm today. You know, 80% of the asset value in U.S. agriculture is land value. That would not actually be true of a typical dairy farm. It would be a little less than that because there's so much in facilities and machinery and equipment, and so on and so forth. But the Walmarts of the world have a lot of asset value but not relative to their sales, right? So, you know, Walmart would not settle for 6% rate of return on assets.
Q. Right.
A. They are turning -- they are generating more sales per dollar of assets.
Q. Okay. Thank you.
On your chart on page 4, and I -- I know -- I think you just answered my question, but I was thinking about my question, and I didn't hear your full answer. So I'll ask it again. Or asked by Ms. Vulin, and I think you answered it.
But unpaid family labor, where is that accounted for or not in these numbers?
A. It is not.
Q. Not at all?

A. No.
Q. Okay.
A. No. No, there's a return to management that we put in as a minimum surcharge. And so some of these farms are going to have very little or none unpaid family labor, some of them are going to have a lot. And that's kind of part of the difference that you see, right, when you look across farm size for dairy farms.
And one of the things that is unique about dairy farms is that there's almost no part-time farms. Right? So lots of commodities in U.S. agriculture, the small farms would be typically part time for hobby, and that's fine, good for them. Right?
But it's -- I mean, I have known two part-time dairy farms in my life, and one of them, the poor guy had a heart attack, so -- from, you know, getting up every morning and milking and then going to work and coming home and doing it. So you just don't see part-time farms.
Q. Okay. Thank you.
I did have a question. I wanted to look at the chart you have on page 4, Figure 1, and then flip to the Figure 2 on page 7.
So Figure 1 is New York dairy farms.
A. Yes.
Q. And Figure 2 is Wisconsin and Michigan farms.
And we're curious just why the ROA, if I compare the two, it seems like New York was a lot more volatile over time than Wisconsin and Michigan, and I'm just

curious if you might expand on why that might be.
A. Part of that is scale, because I have got asset turnover on Figure 2, and asset turnover is up there in the 40th percentile range. So if we chopped that off and, like, capped it at 20, which I can easily do for you, there would be more relative volatility. So I think that's a big part of what you are seeing there.
And we also didn't have the last five or six years on there, which there was a couple of ups and downs. But I can put them on the same scale, but mostly it's vertical scale.
Q. Okay. Great. Thank you.
On page 5, in the paragraph that begins right after the equations you have there, this is just a technical cleanup question. You have OPM equals OPM times ATO.
Is that supposed to be a different --
A. That is supposed to be ROA, yes. I found a number of typos since I sent this in.
Q. We have all been there.
A. Well, hopefully I can resubmit something that's cleaner.
Q. Certainly.
On the Table 3, which is on page 14, the chart that we have been discussing, on the milk marketing cost line, there's a big jump between 2021 and 2022. I'm wondering if you could maybe illuminate why we might see such an increase.

A. That's a good question. Jason Karszes is the one that I work with on this and does a really good job putting this together, and we were just having a conversation about breaking out these milk marketing costs. And, in fact, he's probably working on it today.
My sense is the two biggest drivers -- so it goes from $1.34 hundredweight to $1.69. That was mostly the over-order -- or no, not over-order -- over-base or two-tiered pricing and market adjustment costs that went in there, which also to some extent probably reflected fuel cost because -- so, you know, hauling costs have gone up because of fuel costs, but not only that -- at the farm level, but if the co-op had to go further to find a home, that would have been in those market adjustment costs.
Q. Okay. And that other -- that's also where you say the reblends for, say -- that account for manufacturing losses would be, showing up in that market adjustment?
A. Correct. Yes.
Q. Okay.
A. Well, I can -- I mean, not that it does us any good today, but we're going to break that down more here.
Q. Okay.
And then does the 13th check for co-op members show up anywhere on this chart?
A. We put it into the price, into the revenue. It is in the revenue. So the -- it would show up -- we do the accrual adjustment, so it will show up in the milk price once we adjust for that.

Q. In the gross milk price?
A. Yeah. And total revenue would include that and government payments and, you know, crop sales and things of that nature.
Q. That's my other question. The government payments show up down there?
A. Yes.
Q. Okay. And might that explain some of the large increase in total revenue between 2021 and 2022 as well?
A. Yes.
Q. Now, I want to take a step back since you have been doing this kind of -- I won't ask you any hypotheticals. I will ask you questions hopefully based on your observations over time of doing these profitability studies.
A. Okay.
Q. Can you talk about -- and we have heard a lot of testimony on the impact the lower Make Allowances have had on co-op members and the market adjustments as they show up in your tables.
So can you talk about how you have seen differences between co-op members maybe in their milk check versus independent shippers who wouldn't have those market reblends on their check? I mean, have you observed that?
A. There are some years when you observe what seems to be bigger variations from farm to farm in the net milk price they receive at the end. Yeah. I mean, it shows

up, definitely.

Q. Okay. And then while you are doing these as well, and I know Dr. Bozic asked some questions on risk management, but can you talk about how you have seen over time dairy farmers' use of risk management and maybe does it depend on their size and -- I mean, I just -- you know, we're having questions -- getting testimony on the impact of implementing any changes on risk management positions for dairy farmers. So we have been trying to ask a lot of questions about how does this really -- how would this really impact them, etcetera. I was wondering if you could just add some thoughts on that.

A. Sure. So as I said, we did a -- ten years ago, it was better than ten years ago, we did a big -- fairly big national survey of dairy farmers using risk management, both on the milk side and the feed side. And what we found was that about 15 to 20% were using it semi regularly or regularly, and a lot of the feed side risk management actually goes along with tax management because you can prepay feed if you are doing cash basis income taxes.

But the biggest impediment was lack of knowledge, and along with that, lack of management time. And, you know, so my sense is in addition to kind of economies of size in milking cows, there's also -- beyond the cost benefit, there's -- there are benefits to having a management team.

So we have a different survey, more recently, where we looked at how the management time on a dairy farm was allocated. And on the bigger herds with management teams, they could allocate 10 to 15% of the time to financial and risk management, and on the smaller -- you know, the smaller herds where it was perhaps one operator or two, you simply can't specialize like that.

So there's abilities -- so when I was a kid, if somebody was coming back to the farm, you know, maybe the two or three kids would come back to the farm and they would -- or they wouldn't come back to the farm, they would buy a farm nearby and the family would maybe operate three farms and do some things together.

And my sense is that in recent years it is less likely to be that and more likely to be that the kids come back to the home operation, and the home operation grows, and you get a management team then of five or six people where you can, you know, put time into it, because there is definitely a learning curve on this risk management.

And, you know, dairy co-ops and others have -- well, USC had a dairy options pilot program, I don't know if you guys remember this. It was 2002, so it is getting old now. But I remember doing that around the state of Michigan, to teach farmers -- the whole idea was to subsidize their options trading to incentivize them to do it and learn about it.

And so, you know, at the current -- the other thing that's happened is there's a lot more liquidity in the futures market, right, than there used to be. There used to be -- especially you didn't know if you were going to get a trade done, and now you don't worry about that nearly as much on most of the dairy commodities.

But I think the big thing is the ability to put the time in and -- you know, from a risk management point of view -- and I do a lot of producer meetings. One of the things that I am talking about there is specifically aimed at risk management.

And I understand that there's some overlap between doing this for risk management, but I don't want to lose money doing it. But if you are consistently doing it, you know, a lot of farms have found that it's very useful for them and so, you know, do you have the time, do you have the -- to allocate to that, and, you know -- and do it consistently.

Q. So of the farms that you have observed using those tools, do you have any guess on how far out they look to lock in positions? I'm sure there's a range but --

A. Well, my personal opinion is that the best place to be is nine to 15 months out. That you have enough time value to make it worth -- although it's more expensive, you pay for the time value -- but, you know, in the nearby -- well, the nearby, it is just -- there's not as much time value, there's not as much volatility.

The futures market is really bad at predicting big turns either way. I mean, if you look at it from a financial point of view, the dairy futures market is efficient and unbiased in the long-term, but it misses big turns.

Which is kind of the whole point. Right? If you -- if you -- and if you are in a farm financial situation where you can't be resilient enough to manage through a big turn, then, you know, those tools are -- are useful.

Q. Okay.

MS. TAYLOR: That's it from AMS. Thank you.

THE WITNESS: Thank you.

THE COURT: Anything further from anyone other than redirect?

Redirect.

MS. HANCOCK: Thank you, your Honor.

REDIRECT EXAMINATION

BY MS. HANCOCK:

Q. I want to start -- I just have a couple of follow-up questions. I want to start with Mr. Miltner was talking with you about the amount of maybe continuity in the farms that had changed over time and -- that's been in your survey. I think you actually talked with Ms. Vulin about that as well, saying that some of the farms that you have surveyed or that you have included in your statistical historical data are not the same ones that you have today.

Do you recall that?

A. Yes.

Q. For those that you are no longer serving, is it fair to say that a good percentage of those have just gone

out of business or are no longer farming?
A. Most of them.
Q. And so for those that are represented in your most current years for data, those have been the ones that have been able to successfully weather the downturns?
A. Correct.
Q. And so does -- is it fair to say then that the numbers that are reflected most currently show those farms that are over the historical data collection than the ones that have been the most successful, and so the numbers would be most favorable keeping them throughout the course of your historical data collection?
A. Yes.
Q. Okay. Do you have a name for that?
A. Well, I mean, there's a survivorship bias that we have. I mean, these data are not statistically representative as we went through. And it's certainly possible that over time the bias is -- I mean, so the farms that leave the Farm Business Summary tend to either exit, which is most of them, or some of them grow to the point where they are big enough where they move with -- to have a full-time accountant or something and don't have as much use for participating in our program.
Q. Okay. So the farms that are reflected over the -- you have between 2013 and 2022, they just become more successful over time?
A. The ones that are still there, yes.
Q. Okay. You -- let's see. You also had some

questions from Mr. Rosenbaum about Federal Order regulation language.
Do you recall that?
A. Yes.
Q. And you -- first off, you are not here to be a witness to testify as an expert on Federal Order language; is that fair?
A. That's fair.
Q. Okay. But to the extent that you are talking about the financial implications as it pertains or should be considered by USDA in applying that language, I want to talk about it in that context. And one of them was some -- I think Dr. Bozic was asking you about if -- if there was a governing principal that increasing Make Allowances too high could result in too much or an overproduction of a product, that that could create some disorderly market situations.
Do you recall that?
A. Yes.
Q. And -- and you understand that National Milk and IDFA have both put forth some proposals with respect to increasing Make Allowances?
A. Yes.
Q. And IDFA's proposal has a tempered approach for year one but then automatic increases that by year four would allow it to get to 100% of what it contends to be the Make Allowance.
Do you know that?

A. Yes.
Q. And so if we're talking about what the estimates are for increases, would you agree with me that having an automatic increase over four years to get to 100% number, that that has a much greater likelihood on your probability scale of being too high of a Make Allowance?
A. Well, it would certainly have a higher probability than if you didn't change it.
Q. And in your questions with Dr. Bozic, he had asked you about probabilities versus possibilities, or he had actually asked you about possibilities, and you kind of chuckled. But I want to make sure that the record is clear.
When we're talking about possibilities, is it fair to say in your world that nearly everything is a possibility?
A. Yes.
Q. Okay. And -- but when we look about -- when we look at statistically whether something is more likely or not, it is more valuable for us to know when something is actually more likely to occur than not; is that fair?
A. That's fair.
Q. And so when we look at whether -- at National Milk's proposal and IDFA's proposal, is it fair to say that IDFA's proposal has a much greater likelihood of creating a situation where Make Allowances are too high than National Milk's proposal which would allow for an interim approach and then the collection of real mandatory

audited survey data that would be based on the actual Make Allowance?
A. Yes.
Q. And then, finally, Ms. Vulin came back up a few moments ago and showed you back your graph on -- I think that it's Figure 1 on ROA --
A. Yes.
Q. -- and that you have charted?
And she said that -- she had you acknowledge that in year 2009 was the only year that it fell below zero on your ROA.
Do you recall that?
A. I do.
Q. You're not saying that that's the only year that dairy farms were not profitable under your survey; is that right?
A. Well, no. I mean, so it -- it -- no. The rate of return on assets there is the return to the unpaid factors, and none of these farms have no unpaid factors. So, you know, the investment that goes into the land, the facilities, the capital that could be doing something else, you know, it needs to earn a return or it needs to find a better use.
So it doesn't have to be -- I mean, 2009 was catastrophically bad. What happened in 2009 was that people milked cows 365 days a year and paid for the right to do it. But hopefully that was a once in a lifetime. Although every time I say that was a once-in-a-lifetime

activity, shortly something happens that teaches me that that wasn't the case.
Q. Fair enough.
And then one thing on Table 3 that I want to make sure that we have clear. Do you know, when we were talking about the milk hauling cost, and you have enumerated a number of items that would be put into that category, do you know what percentage -- and we could take 2022 as an example year -- but do you know what percentage of those milk marketing costs are represented by -- or are hauling costs?
A. Off the top of my head, no, but I would guess more than half of that.
Q. Okay. And has that consistently become a higher percentage over the course of the time that you have been tracking those numbers?
A. Has the hauling cost consistently? No, the hauling cost I would say has consistently gone down.
Q. As a percentage of --
A. As a percent of this total, because other costs -- at the beginning of this time period, we weren't finding things like the over-base deductions and two-tiered pricing systems and market adjustments like what we have had in recent years.
Q. And so while we know that over time the actual number of hauling costs have actually increased, the hauling percentages as a total percentage of the milk marketing costs has gone down?

A. Correct.
Q. Okay.
MS. HANCOCK: That's all I have. Thank you, your Honor.
We would move -- or thank you, Dr. Wolf.
And, your Honor, we would move to admit Exhibit 169.
THE COURT: Mr. Rosenbaum thinks you have opened a door.
MS. HANCOCK: Okay.
MR. ROSENBAUM: I know so.

RECROSS-EXAMINATION

BY MR. ROSENBAUM:
Q. Steve Rosenbaum for the International Dairy Foods Association again.
Let me start with sort of the last set of questions. I think you have testified that to the extent that there are what I'll call base/excess plants or things of that nature, those are reflected in your statistics; is that correct?
A. Yes.
Q. And you know what I mean by -- a base/excess plant is where a co-op will say to a farmer, for a certain quantity of milk, we'll pay you X, but if you go beyond that, we're going to pay you less, correct?
A. Correct.
Q. And that's sort of meant to be a disincentive to increase production, correct?

A. It is.
Q. And the statistics you collect, they cover farmers that are members of a number of different cooperatives, or what?
A. Yes.
Q. Okay. So can you provide us -- do you have any -- know how many different cooperatives your statistics cover, even a rough number?
A. Half a dozen.
Q. Okay. And of those half a dozen, how many of them currently are operating these base/excess plants; do you know?
A. I can't -- I know at least one, but it -- it varies. So I can't give you a definitive answer. Sorry.
Q. It varies in that some of them have had them in the past but don't right now, and some have them right now?
A. Correct.
Q. Okay. So now getting back to the probability of risks.
If -- if -- if it's National Milk's own position that Make Allowances are currently lower than cost of production and that their proposed increase is not intended to cover the actual cost of production, does that suggest that our current situation is one in which Make Allowances are too low?
A. It might suggest that.
Q. Yes. And so if there is -- was a -- if you will,

a risk at being too low and a risk at being too high, we're pretty much guaranteed that we are in a situation where currently the risk is one that is fulfilled, and it's too low, correct?
A. Possibly.
Q. Okay. And are you aware that we will be presenting evidence as to what survey evidence suggests is the actual cost of production? Are you aware of that?
A. Yes.
Q. And you are aware that we are asking for Make Allowances to be increased only to that level, correct?
A. I understand that at least in the first iteration.
Q. Okay. Well, are you aware that our entire four-year stairstep is intended to bring us to Make Allowance that are equal to what the 2022 costs of production are?
A. Yes.
Q. Okay.
MR. ROSENBAUM: That's all I have, your Honor.
THE COURT: Any re-redirect?
MS. HANCOCK: Your Honor, we would move to admit Exhibit 169.
THE COURT: Seeing no objection, Exhibit 169 is entered into the record.
(Thereafter, Exhibit Number 169 was received into evidence.)
MS. HANCOCK: Thank you, Dr. Wolf. Appreciate

your time.
THE WITNESS: Thank you.
MS. HANCOCK: Catherine de Ronde is our next witness.

CATHERINE de RONDE,

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

THE COURT: Your witness.

DIRECT EXAMINATION

BY MS. HANCOCK:
Q. By three minutes, good morning, Ms. de Ronde.
A. Good morning.
Q. Thank you for being here today.
Would you mind stating and spelling your name for the record?
A. Yes. My name is Catherine de Ronde, C-A-T-H-E-R-I-N-E, D-E, R-O-N-D-E.
Q. Is it a capital R in your last name?
A. It is a lower case D and a capital R.
Q. Okay. Would you provide your business mailing address?
A. 40 Shattuck Road, S-H-A-T-T-U-C-K, Andover, Massachusetts, 01810.
Q. Thank you.
Did you provide written testimony on behalf of National Milk that we have identified as Exhibit NMPF-20?
A. Yes.
MS. HANCOCK: Your Honor, I believe we're at

Exhibit 170 for identification.
THE COURT: That's what I had. So marked.
(Thereafter, Exhibit Number 170 was marked for identification.)
MS. HANCOCK: Thank you.
BY MS. HANCOCK:
Q. Ms. de Ronde, would you provide us with your testimony, please?
A. Happy to.
Thank you for allowing me to speak with you today. I am Catherine de Ronde, vice president of economics and legislative affairs for Agri-Mark, Incorporated. I'll refer to us as Agri-Mark from here on out.
I have been with the cooperative for six years, three in my current capacity and three as the cooperative's economist. My responsibilities include watching dairy market trends, forecasting milk prices, and working on state and federal legislation affecting Agri-Mark members.
Prior to joining Agri-Mark I worked as an agricultural economist with the Massachusetts Department of Agricultural Resources. While at the Department, I worked with the variety of agricultural industries, most notably the dairy industry. I have a Bachelor's and Master's degree in environmental science and resource economics from the University of Connecticut.
Agri-Mark is a dairy cooperative --
MS. TAYLOR: Excuse me. Can you slow down a

little bit for the court reporter?

THE WITNESS: Yes. I was trying to be aware of that, but I guess unsuccessfully.

Agri-Mark is a dairy cooperative owned by approximately 550 dairy farm families in New England and New York.

Our members are pooled in Federal Order 1. Our cooperative has been marketing milk for dairy farmers since 1916 and has headquarters in Andover, Massachusetts and Waitsfield, Vermont. Our farm families supply more than 3.2 billion pounds of milk annually that we use to make our award-winning Cabot branded cheeses, dairy products, and ingredients.

Agri-Mark operates three cheese manufacturing facilities located in Cabot, Vermont; Middlebury, Vermont, and Chateaugay, New York. These are pooled supply plants. In addition to cheese, the Middlebury, Vermont, plant also produces valuable whey proteins that are marketed around the world. Agri-Mark also operates a butter-powder facility in West Springfield, Massachusetts, that is a non-pooled supply plant. Lastly, Agri-Mark supplies fresh fluid milk to the region’s largest dairy processors.

My testimony today is on behalf of Agri-Mark and our 550 farm families. Milk pricing is front and center for our farmers, particularly given the market volatility of the past few years. We thank USDA for granting this hearing and for the opportunity to testify today.

Agri-Mark, along with 15 other dairy cooperatives, served on National Milk Producers (NMPF) Task Force focused on Federal Milk Marketing Order modernization (FMMO) over the past many months and nearly two years now.

Agri-Mark is in support of all aspects of the comprehensive NMPF FMMO modernization proposal. My testimony focuses on our support of Proposal 7 submitted by NMPF to update the FMMO Make Allowances in each of the component price formulas.

Of all the modernization pieces the NMPF Task Force reviewed, updating Make Allowances was by far the most challenging topic. The Task Force spent months evaluating different data sources and methods to update the cost data we had. Despite the challenges, it became apparent quickly that the dairy industry needs a new, consistent, and accurate method to collect robust cost of processing data.

FMMOs are intended to meet several objectives, including promoting orderly milk marketing. Through end product pricing, raw milk prices are determined via a series of economic formulas. If any aspect of those economic formulas is not reflective of the marketplace, the resulting calculated prices will be unsuitable, and disorderly marketing may occur.

This may be easiest to illustrate using Make Allowances, which were last updated in 2008 using 2006 cost of processing data. While the FMMO Make Allowances have remained fixed, actual manufacturing costs have increased over the past fifteen years, resulting in overvalued FMMO prices.

Impacted manufacturers are forced to solve for this with individual solutions. However, solving for Make Allowances at the manufacturing level, versus the FMMO level, creates discrepancies in producer pay prices within the same marketplace. Increased costs of manufacturing must be addressed through FMMO Make Allowances now and often in the future to correct for cost discrepancies and maintain orderly markets.

Agri-Mark supports NMPF's legislative efforts to provide USDA with the authority to conduct mandatory and auditable costs of processing surveys every two years. Granting USDA this authority legislatively will provide a robust, accurate, and timely source of processing cost data for the industry to evaluate.

Hearing requests can be made if the survey data suggests Make Allowances may be unrepresentative of actual processing costs. In the absence of this data, maintaining accurate FMMO pricing is a challenge. With widespread industry support for this effort, we are confident that this authority will be granted.

With published, audited processing cost data derived from mandatory surveys, the industry will be much better positioned to make educated decisions on Make Allowances in the years to come.

However, current Make Allowances are extremely out of date, and the industry needs an interim fix. We cannot wait. The sense of urgency is widespread, but particularly crucial to cooperatives with Class III and Class IV manufacturing assets. These cooperatives, including Agri-Mark, struggle to maintain profitability while paying members minimum announced milk prices. These cooperative members face financial burdens beyond those without manufacturing assets. An interim fix is required to return to orderly markets.

Agri-Mark supports NMPF's proposal to increase the Make Allowances incorporated within the component price formulas as follows:

(1) Butterfat, from $0.1715 to $0.21 per pound of butter;

(2) Nonfat solids, from $0.1678 to $0.21 per pound of nonfat dry milk;

(3) Protein, from $0.2003 to $0.24 per pound of cheddar cheese;

(4) And lastly, other solids, from $0.1991 to $0.23 per pound of dry whey.

These numbers represent per pound increases of $0.0385 for butter, $0.0422 for nonfat dry milk, $0.0397 for cheese, and $0.0309 for dry whey.

Agri-Mark supports Proposal 7 submitted by NMPF. Agri-Mark acknowledges, as does NMPF, that from a pure manufacturing perspective, the proposed Make Allowances are not adequate and will not cover the full increase in costs of processing Agri-Mark and many other Class III and Class IV manufacturers have incurred since 2008.

These increased costs, instead of being captured in a Make Allowance, are transferred to members via lower returns and pay price adjustments. Further, they stymie cooperatives' ability to invest in the future.

As a cooperative, we must balance the financial needs of our manufacturing assets and member pay price implications. The results from an overdue change in Make Allowances will be dramatic in and of itself.

Agri-Mark views Proposal 7 as the first step in the right direction, providing some financial relief to manufacturers, while ensuring a reasonable producer impact. Paired with a legislative fix to conduct future costs of processing studies, Agri-Mark holds that this two-step approach is the best for the industry at large.

Other NMPF witnesses have testified to the numerous data sources evaluated by the NMPF Task Force over the last nearly two years. Those include studies by Cornell University, the California Department of Food and Agriculture, and the University of Wisconsin.

Each have its limitations, but all show a clear trend. Manufacturing costs of butter, nonfat dry milk, cheddar cheese, and dry whey have increased since 2008. NMPF and others have conducted trends and regression analysis on these costs and have reached the same conclusion.

An analysis of Agri-Mark's cost of manufacturing tells a similar story. Costs of processing across our four plants have increased on average 20% since 2008. Increases are found across all cost categories. Most recent and notable are increases in cost of insurance, manufacturing labor, and benefits, and repair and maintenance.

Agri-Mark has made investments in our plants to improve efficiencies and reduce costs of processing; however, these noted increases are in categories that are largely market-driven and outside of our control.

For instance, insurance premiums have increased tremendously in response to general conditions in insurance markets. Regarding repair and maintenance, we continue to spend money to upgrade and keep our plants going; however, increases in supplies and labor are more expensive. Lastly, labor is critical to our operations and continued investment in our employees is essential. Costs of labor and benefits must be competitive and move with the local markets.

Our three cheese plants produce cheddar cheese, in a mix of 40-pound blocks and 640-pound blocks. Cheese produced is sold as a mixture of branded and commodity cheese, through a combination of retail, private label, and foodservice channels.

Our Middlebury, Vermont, plant processes all the whey generated by the three cheese plants, and produces dry whey, whey protein concentrates, and whey permeate.

Costs of processing vary by plant, based on plant volumes, efficiencies, and product mix. On a weighted average Class III basis, these three plants have seen costs of processing increase 23% since 2008.

Our butter/powder plant in West Springfield, Massachusetts, produces retail, private label, and foodservice butter, as well as commodity nonfat dry milk. Cost of processing have increased 17% on a Class IV basis since 2008.

It is worth noting that our West Springfield facility has a long history of balancing milk in Federal Order 1. In recent years, as the Northeast has become long in milk and Class I utilization has decreased, this dynamic has shifted.

Today, West Springfield often runs at full capacity. In the future, however, as additional capacity comes on, we expect West Springfield to return to its critical function of balancing the Northeast market. While we recognize the essential role this plant has to the region, we also are keenly aware that it is a service that comes at a higher cost of processing to Agri-Mark and its member-owners.

In summary, all data sources point in the same direction, manufacturing costs have increased since 2008. Today’s Make Allowances are inadequate for all four commodities and are leading to disorderly marketing conditions.

Agri-Mark supports Proposal 7 submitted by NMPF because it strikes the right balance of addressing the needs of manufacturing plants and producer pay price implications, in a way that minimizes disorder in the marketplace.

Agri-Mark is supportive of the two-step approach NMPF has outlined in its proposal to update Make Allowances:

(1) Provide an interim increase to alleviate the acute problems and disorderly market conditions created by the current, clearly insufficient Make Allowances;

(2) Enact the authority for the Department to conduct mandatory, auditable plant processing cost studies, conduct such a study under that authority, and present the resulting data to the industry, which will enable interested parties to make requests for further Make Allowance adjustments on the basis of proper and adequate data;

(3) Continue to conduct and report plant processing cost studies regularly and systematically under the same legislative authority and mandate.

The impact of increasing Make Allowances on producer pay checks is well known. Agri-Mark does not take this impact lightly. Likewise, the financial stress of outdated Make Allowances on cooperative profitability is well known. Agri-Mark members have invested in their cooperative and manufacturing capacity for over 100 years. We look forward to continuing this legacy.

BY MS. HANCOCK:

Q. Thank you, Ms. de Ronde. I want to -- just a couple of questions here.

You and a dairy farmer that testified earlier today that also sits on your board, and you heard some

questions that were posed to him about this 20% increase in your cost of production since 2008.
Do you recall that?
A. I do.
Q. And -- and did you help collect the numbers and report the numbers of that 20% increase?
A. I was part of the team along with our finance and accounting team that looked at that number.
Q. Okay. The numbers that you have acknowledged on page 2 of your testimony that align with National Milk's proposals, those are all approximately a 20% increase to the current Make Allowance; is that right?
A. I don't have that math in front of me, but they are pretty close to that 20% mark.
Q. Okay. And that aligns with the 20% increase that your entity has experienced since 2008; is that accurate?
A. That is correct. But I will clarify that that 20% is an average over all four of those commodities. So on average, we align at that 20%, but on a category-by-category basis there are some discrepancies.
Q. Yeah. And so you have some product lines that will have an increase that's greater than 20% and some that will be lower than that?
A. Correct.
Q. And you are able to make business decisions as you continue to operate your business over those years, as to which product lines you want to emphasize or some product lines that you might want to de-emphasize, based on your

own profitability analysis; is that right?
A. That's correct.
Q. And that profitability analysis would take into account that cost of production for Agri-Mark's business?
A. It would.
Q. And during that same time, you have been able to have some plant improvements that you have implemented in your various plants?
A. Yes.
Q. And other -- other improvements that -- where you have been able to create new lines for your production as well; is that right?
A. That's correct.
MS. HANCOCK: Your Honor, I would offer Ms. de Ronde for cross-examination at this time.
THE COURT: Yes. Cross?
MR. ROSENBAUM: Should we break for lunch, your Honor?
THE COURT: Okay. We've got this witness up.
Let's come back in an hour, at 1:15.
(Whereupon, the lunch recess was taken.)
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MONDAY, SEPTEMBER 11, 2023 - - AFTERNOON SESSION

THE COURT: I think we introduced this witness, marked her statement with an exhibit number, and I'd asked if there was cross-examination.

Mr. Rosenbaum.

CROSS-EXAMINATION

BY MR. ROSENBAUM:

Q. Good afternoon. Steve Rosenbaum for the International Dairy Foods Association.

I have some initial questions relating to the question of cost increases at your plants since 2008. But before I even get to that, just to make sure the record is actually clear, you are aware that Dr. Stephenson published this year in 2023 a study of costs of manufacture in 2022, correct?

A. Yes.

Q. And did Agri-Mark participate in the survey?

A. We did.

Q. Okay. So -- and as I understand it, you have four plants in Cabot, Vermont, Middlebury, Vermont -- and Chateaugay, is that how that's pronounced?

A. Chateaugay.

Q. -- Chateaugay, New York, and West Springfield, Massachusetts, correct?

A. Correct.

Q. And when you are reporting on your cost increases since 2008, you're covering all four of those plants, correct?

A. When I reference the 20%, that's covering all four plants.
Q. Okay. Now, am I correct that you did not, in calculating the cost increases, limit yourself to the products that actually are used to set minimum milk prices; is that correct?
A. No. So the 20% is looking at cheddar cheese, dry whey, butter, and nonfat.
Q. Okay.
A. We took our cost of processing in 2008 for those four commodities, and we took the same cost of processing for these same four commodities in 2023, and that difference is 20%.
Q. Okay. And when you say you included butter, was it all butter, or did you limit that to commodity butter?
A. So all of this would just be on commodity. So anything that we would have sold via brand would not be included in that.
Q. Well, I see you say you make retail, private label, and foodservice butter --
A. Uh-huh.
Q. -- at your West Springfield plant.
So were all of those categories included in the cost survey?
A. The cost of -- yes.
Q. And I'm -- let me be a little more specific.
A. Sure.
Q. I really didn't mean to say the cost survey.

Were all of those kinds of butter included in calculating the increase in cost of processing that you are reporting in your testimony here in Exhibit 170?
A. So the cost of processing for butter in this example, what we would have used for the cost would have been in line with what we submitted with the Stephenson study.
Q. All right. One second.
So I know there was testimony by your -- by the previous Agri-Mark business as to material investments made in the -- I'm going to get this wrong again, Chat- --
A. Chateaugay.
Q. -- Chateaugay plant as well as -- which he qualified at $30 million.
Is that a correct number?
A. That is correct.
Q. And then he also mentioned an investment in the West Springfield plant, although he did not identify exactly what that cost expense was.
Is that right?
A. Yep.
Q. Okay. So let's talk about the other two plants first, which would be the Middlebury plant and the Cabot, Vermont, plant.
A. Okay.
Q. Have you made significant investments in those two plants recently?
A. We -- not significant. And I think there's -- you

know, there's some definition around significant. When we think significant investments for our entire organization, the two that pop out are the West Springfield and the Chateaugay.
Q. Okay.
A. That's not to say that we haven't had smaller investments in those plants from an efficiency standpoint.
Q. Okay. So when it came to Cabot and Middlebury, how did you calculate depreciation for purposes of doing your calculations, or were they fully depreciated?
A. I was not involved in those calculations, so I don't want to speak to that specifically.
Q. All right. So then what about then the two plants for which there were material investments, Chateaugay and West Springfield?
A. Uh-huh.
Q. Do you know how you determined depreciation for these plants?
A. So same answer, I was not part of those calculations.
Q. Just to ask, your answer may be the same, but just so we're clear, do you know whether the people used GAAP accounting or tax accounting or something else?
A. I could make an educated assumption on that, but for the record, I will not answer that because I don't know for sure.
Q. All right. And -- and do you know whether you included an allocated general administrative cost in those

numbers?
A. I believe that G&A was included.
Q. I don't see that mentioned specifically in your testimony.
A. It is not mentioned specifically, no.
Q. Is it -- are you positive one way or the other whether it was included?
A. It was part of it.
Q. Okay. What about energy?
A. Energy would have been included in that as well.
Q. Okay. But if I understand correctly, your testimony remains that the current Make Allowances are lower than your cost of production, correct?
A. On average, yes.
Q. And if the Make Allowances are increased to the level that National Milk is seeking, your costs of production will continue to exceed the Make Allowances; is that right?
A. For some of our products.
Q. Okay. You mean for some of the four products that you have listed there?
A. Uh-huh.
Q. Okay. Are you wanting to tell us which ones?
A. No, I'm not.
Q. Okay. And what switching topics.
What -- what -- what activities does Agri-Mark engage in that would tend to retard the growth in milk production by your farmers, be it base/excess plants or

things of that nature?
A. As was mentioned this morning by our farmer witness, Agri-Mark does have a base/excess program in place.
Q. Okay. And can you describe the general contours of that program --
A. Yes.
Q. -- with whatever specificity you are willing to do that?
A. Sure. So it is a base/excess program where we -- the intent of that is to manage our milk volumes with the capacity that we have both internally and within the, you know, external marketplace in the Northeast.
Q. Okay. And is it fundamentally a system whereby as long as the farmer stays within his or her base production level, he or she gets paid basically what I'll call a full price, and once he or she goes beyond that, he or she gets a lower price, correct?
A. That's correct.
Q. And is the lower price sufficiently lower that, as a practical matter, it makes it difficult for the farmer to make any money by producing that extra milk?
A. Yes.
Q. And is the goal basically to limit the farmer to his or her base?
A. The goal is to disincentivize production beyond their base.
Q. Is it successful?

A. It is successful.
Q. Okay. All right. And so you, I think, probably were here when I was asking some questions to I believe the president of your --
A. Chairman.
Q. -- the chairman of Agri-Mark about timing. So I'll ask you those questions here.
Let me just ask: You are on the National Milk Producers Federation task force; is that right?
A. Correct.
Q. You personally?
A. Correct.
Q. Okay. Was there -- do you recall discussion as to if there was, in fact, legislative authority granted to USDA to engage in mandatory audited surveys, what the timing would likely be by which new Make Allowances could be adopted based upon that?
A. Well, I think that the timing is probably anyone's guess given that we would be putting that in the hands of Congress to make that progress in terms of timing. But I think, as you know, our goal is to get that in the next Farm Bill, whenever that Farm Bill may be.
Q. But was there any discussion you can recall about the timing of next steps?
And let me just lay out what we would see as the next steps. You can dispute any of them if you wish.
One is USDA would have to publish implementing regulations that would cover how they would conduct the

expanded authority they would be given, correct?
A. Uh-huh.
Q. And the second is they would have to conduct the survey, correct?
A. Correct.
Q. And they would have to gather the information and perform whatever review or audit of the information they thought was appropriate before they actually published the result, correct?
A. Correct.
Q. And then, and only then, would there be an opportunity for anyone to request a hearing to consider the adoption of new Make Allowances based upon those new numbers, correct?
A. Correct.
Q. And if USDA followed its normal practices, upon receiving a request for proposal, they would potentially -- they would potentially either turn down the request or invite others to submit counterproposals by some specified point in time, correct?
A. Correct.
Q. And USDA would have a certain amount of time to decide what proposals to include in the hearing, correct?
A. Correct.
Q. They would put out a Notice of Hearing, correct?
A. Correct.
Q. They would hold a hearing, correct?
A. I'm feeling a little déjà vu here. Correct.

Q. Déjà vu and the future.
A. Yes.
Q. And they would hold the hearing -- I'm not sure if I said that already -- but they would hold the hearing, correct?
A. Correct.
Q. They would potentially be an opportunity to correct the transcript once the transcript is published some days or weeks later, correct?
A. Correct.
Q. Briefs would then be filed by a certain date, correct?
A. Correct.
Q. USDA would then issue a recommended decision, unless someone had submitted a request for an emergency decision, which could go in effect without a recommended decision, and USDA could do that if it felt the criteria were met for that, correct?
A. Correct.
Q. And if it didn't have an emergency decision, and therefore issued a recommended decision, there would be opportunity to comment on the recommended decision, correct?
A. Correct.
Q. A final decision would be issued, correct?
A. Correct.
Q. And then there would have to be a farmer referendum?

A. Correct.
Q. So during that entire time period -- and this, of course, presupposes we get the legislation from Congress to begin with -- but during this entire time period, processors would be operating under Make Allowances that, according to your own testimony, even assuming they -- and under a scenario they have adopted, a National Milk proposal, not our proposal -- processors would be operating under a scenario in which they would be incurring cost of production materially in excess of the Make Allowances; is that right?
A. I believe so.
MR. ROSENBAUM: Okay. I think that's all I have. Thank you.
THE COURT: Further cross for this witness?
CROSS-EXAMINATION
BY MS. VULIN:
Q. Ashley Vulin, an attorney with the Milk Innovation Group. Nice to see you this afternoon.
A. You too, Ashley.
Q. I'll start with just a couple of questions on the base/excess program.
Do all cooperative members of NMPF have a base/excess program?
A. I'm not -- I won't speak for other National Milk processors.
Q. Do you know of any cooperative members of National Milk who don't have one, a base/excess program?

A. I'll let others answer that. I don't want to answer for them. I don't know for sure.
Q. And you raise in your testimony issues of disorderly marketing arising from insufficient Make Allowances.
Do you recall that?
A. I do.
Q. I'll specifically point you to page 3 under the summary of your testimony. You say, "Today's Make Allowances are inadequate for all four commodities and are leading to disorderly marketing conditions."
Do you see that?
A. Can you tell me where on page 3 that is, please?
Q. Yep. At the bottom under "Summary." It's the second sentence.
A. Yep.
Q. Can you describe for me, what are the disorderly marketing conditions occurring today due to insufficient Make Allowances?
A. When I think about the disorderly market conditions because of Make Allowances, when we -- you know, so for Agri-Mark in particular, we know where there -- where we have deficiencies. And we as a cooperative are forced to react to that.
When we react differently than a neighbor, we're put on a different competitive playing field than that neighbor. And I believe it is the intent of the Federal Milk Marketing Order to level the playing field and put us

all on an equal playing field, competitively speaking. And if Agri-Mark's milk checks need to be adjusted differently than others because of how we operate in the marketplace, I believe that that is disorder in the marketplace.

Q. And when you say in comparison to a neighbor, are you referring to another cooperative and farmer or another plant?

A. In that case I was referring to another cooperative or plant.

Q. And then you mentioned a few times in your testimony that Agri-Mark acknowledges that NMPF's proposed Make Allowances won't cover the full increase in costs of processing for Agri-Mark, correct?

A. Uh-huh. Yes.

Q. So how will those disorderly marketing conditions cease to exist under NMPF's plan?

A. Yeah. So I -- this is a tricky one, a tricky line for us to walk. But we are supporting the National Milk proposal in its entirety because we feel that there are multiple areas of the orders that are causing -- that where there are discrepancies and there are causing disorderly markets. And Make Allowance is the prime example of that.

If we were just Agri-Mark, we would be going for higher Make Allowances, okay, to cover us. But we operate in a marketplace with a lot of farmers outside of Agri-Mark, and quite frankly, the National Milk proposal takes into account that there are many other co-ops other than Agri-Mark, and we are all in a very different place from a Make Allowance perspective. I think you heard last week folks say that this was a compromise amongst our group, and that's a compromise we're comfortable with. But -- so I think that goes to explain kind of the line that we're walking here.

Q. Uh-huh.

A. So for us we may not be made whole in all of those commodities necessarily, but for a greater dairy industry perspective, we firmly believe that the National Milk proposal is that appropriate fine line.

Q. And would you -- so would it -- would you agree with the statement that under National Milk's proposal, it won't cure the disorderly marketing induced by insufficient makes, but it will lessen that disorderly marketing?

A. Yes. And I think I had an adjective in here somewhere, lessen or something along those lines. But, yes, I would agree with that statement.

Q. And you talked about the increase in costs of production for your various plants, correct?

A. Yes.

Q. And you said that for your Class III plant the weighted average -- on a weighted average basis, the processing costs increased by 23%, correct?

A. That is correct.

Q. It's on page 3 of your testimony?

A. Yep.
Q. And that's slightly above where NMPF's proposed Make Allowances for Class III, correct?
A. Correct.
Q. So Agri-Mark's cost of -- increased cost of production is almost accounted for but not quite?
A. Correct.
Q. And then you said for your butter/powder plant in West Springfield, that the processing costs have increased 17%, correct?
A. Correct.
Q. And by my calculation, NMPF's proposed increases for butter are a 22% increase, and for nonfat dry milk a 25% increase.
So for that plant, the Springfield plant, would Agri-Mark have its increased cost of production met under NMPF's proposal?
A. Under butter but not powder.
Q. Okay. And so at least for the butter portion, Agri-Mark would be in a place of advantage because more than its cost of production would be covered, correct?
A. We are slightly under the current make.
Q. And your colleague testified earlier about milk check deductions and how those are caused by insufficient Make Allowances at the plant level, correct?
A. Correct.
Q. So how do current milk check deductions -- I'm sorry. Strike that.

And you had said just now that those deductions would either go away or that essentially Agri-Mark's farmers would be in a better position with higher makes than what NMPF is proposing, correct?
A. If we have higher make than what National Milk is proposing, then we would still be met short on those particular commodities.
Q. Even under IDFA's proposal?
A. I would need to reference those numbers, and I may have them.
Yes, it differs by commodity. But as I said, some of the National Milk numbers make us whole, some do not.
Q. Okay.
A. And that's the same for IDFA.
Q. And in determining the amount or the level at which NMPF's proposed Make Allowances are landing, you had talked about a compromise amongst the group to reach those numbers; is that right?
A. Yes.
Q. And in your testimony, at the top of page 3, the end of the paragraph there, you say, "NMPF and others have conducted trend and regression analyses on those costs and have reached the same conclusion," about trends with Make Allowances -- or with manufacturing costs increasing, correct?
A. Correct.
Q. So did NMPF use any of that trend and regression analysis in landing on its final proposed Make Allowance

numbers?
A. My recollection is that the trend in regression analysis that was conducted by National Milk was used to support the directional trend that we were looking at. The numbers that we are proposing came from what others before me have mentioned with the survey that we did within the National Milk group.
Q. And that survey wasn't a survey of Make Allowance -- or manufacturing costs of the participants, it was just a pure what-number-would-you-agree-to survey?
A. I'll tell you how we answered it, and we answered that based on what our manufacturing costs were.
Q. Was that the prompt in the survey, though? Was it to report your manufacturing costs or was it to request a compromise number that you could live with, although not based on a mathematical calculation?
A. My recollection was it was slightly a mix of both. So in an instance, for example, where maybe you were making cheddar cheese, but you did not make butter, folks could have submitted what they thought may have been a butter number without actual cost data.
Q. And did anyone audit any of that cost data to ensure it tracked with NMPF respondents' vote of what number the Make Allowance should be set at for NMPF's proposal?
A. Not that I'm aware.
MS. VULIN: Nothing further. Thank you.

CROSS-EXAMINATION

BY DR. BOZIC:

Q. Good afternoon, Catherine. Marin Bozic for Edge Dairy Farmer Cooperative.

And the court reporter has already given me the evil eye, so I'll speak very slowly.

I want to make sure that I understand your reasoning for how higher Make Allowances specifically benefit Agri-Mark.

Is it -- you're content that currently you are forced to reblend more than some of your competitors in the region because of your manufacturing setup; is that a fair statement?

A. That is a fair statement. But I will be clear that Make Allowances are a portion of the challenges that we're going through. So when we think about our milk check deduction, part of that is absolutely correct what you just said, but it is not the full story either.

Q. Full story being the other four topics of the survey -- of the hearing or --

A. No. Nope. You know, if you think about our cooperative, and we have branded products, there are costs associated with that that we -- that are outside of traditional manufacturing costs.

Q. Oh, sure. Sure. So how come this other co-op doesn't have to reblend as much as you?

A. I'm not going to speak to other co-ops and why they do what they are going to do.

Q. I guess where I'm going with that is let's say that AMS increases the Make Allowances, and you no longer have to reblend. Would it not be the case that it would be a reasonable expectation that your competitors would pay the same to their producers or relative to you that maybe they would then pay over-order premiums? I guess I -- I'm -- I'm -- from your statement one could infer that higher Make Allowances would not be transferred to over-order premiums by your competitors; is that a fair statement?

A. Yeah. I mean -- so when we worry about being competitive with our neighbors, what's important for us is that if there is a piece of the Federal Order formulas that should be -- should capture market intelligence, market data, right, what's going on, we want those to be part of the regulated price.

Q. So --

A. That would be a prime example with makes. We want that to be captured in the regulated price, so that, again, we're on the same playing field as our competitors, not in an unregulated price via a milk check deduction.

Q. But you are not contending that the pool accounting, once the Make Allowances are changed, leaving all the other changes aside, that the pool accounting would result in a higher draw for Agri-Mark from Order 1; is that correct?

A. Could you please state that again?

Q. Let's say that AMS doesn't change anything else

other than increase Make Allowances.
A. Uh-huh.
Q. As a result of that, do you anticipate Agri-Mark would have a higher draw from Order 1, total dollar numbers that you would draw from Order 1?
A. I haven't done the math on that, but the deductions in the Class III and IV price would flow into the Class I formula, so I would think that that would -- I don't know how that math would work out, you know, if we --
Q. But because both the Class I skim and the Class III and IV would go down, it's reasonable to assume it would be roughly a wash?
A. I would think so, but I haven't done that math.
Q. So if we increase Make Allowances -- AMS, I don't have that authority -- if AMS increases Make Allowances, wouldn't that make it easier for private handlers to be pooled rather than opt out from the pool system from the Federal Order system?
A. Ask me that one more time, please.
Q. If I'm a private handler, privately held handler, and the Make Allowances are insufficient for my cost of production, the only recourse I have today is to opt out of pooling, be unregulated.
A. Uh-huh.
Q. If the Make Allowances are increased, I might come back and pool again.
So far so good?

A. Yep.
Q. So if more privates pool -- and I will admit, I don't know enough about Order 1 -- but if, in general, if more privates pool on the order, would it not -- would it not follow that whatever is the surplus between the handlers' value of the milk and the commodity value of milk, would have to be split over more pounds?
A. I don't know. I don't know. And I think, you know, you may or may not know, but in the case of Federal Order 1, our pooling provisions are extremely strict. So depooling in Order 1 is kind of a once-in-a-lifetime opportunity. The stars really need to align to see pooling -- or excuse me -- to see changes in pooling in Order 1.
Q. I grant that for Order 1. But let's -- in general, the math should not be difficult. If you add more pounds to the pool, you don't charge more to Class I, so the amount of money we can distribute as a PPD doesn't change, there's more total PPD, there's --
A. Class III utilization would be going up.
Q. Class III -- that's a good way to put it. Or Class IV.
So the manufacturing class utilization goes up, so therefore, PPD has to be split among more pounds so the draw per hundredweight actually goes down.
A. Okay. Yep.
Q. Is that a fair statement?
A. Yes.

Q. So wouldn't that not follow that increasing Make Allowances on its own, not as a sort of gambit to get higher composition or Class I differentials, but increase in Make Allowances on its own could actually reduce the total draw by co-ops who are consistently pooled in orders where privates do currently depool?
A. Please state that once again.
Q. Let's say that in Order 30 we had a private cheese manufacturer who is looking at Make Allowances today and say, no, they are too low, I'm out. And then, Make Allowances go from $0.20 to $0.24 on cheese and with others -- other products go up as National Milk wants, and now that same cheese manufacturer in Order 30 is looking at Make Allowances and says, yeah, I can make this work, I'm going to start pooling again. We didn't start selling more fluid milk, more beverage milk in the Upper Midwest just because --
A. Your weights are changing.
Q. Right.
A. Yep.
Q. Yeah. So wouldn't that mean that if a co-op such as Ellsworth or Foremost or Land O'Lakes, who are presumably consistently pooled, wouldn't that mean that per hundredweight their draw would actually be lower as a consequence of increasing Make Allowances?
A. Yes.
Q. Would it also not be the case then if Make Allowances are increased to a point that it makes

sense to build a new powder plant, because they cover costs of production, maybe even to your level, and then somebody build a new plant, and it's more than they need for normal returns of capital, would it not follow that Agri-Mark would have a stiffer competition for your products?
A. Yes.
Q. Could that hurt your members?
A. It could, but it could also open up capacity in the Northeast, which would be very beneficial to our members.
Q. But if -- if that competition builds a plant in Mideast or Central or Southwest, that would not mean more capacity for Northeast?
A. Correct.
Q. Only more competition for Northeast?
A. Uh-huh.
Q. So there is tangible danger of overdoing it on Make Allowances for AMS, correct?
A. Correct.
Q. And given that the survey results are not audited, would you say that the plants submitting their results voluntarily to Dr. Stephenson's survey, would you say that they had the -- I'm not saying that anybody's acting in best way, just looking at incentive, would you say that they have the incentive to represent their numbers to the extent that there is ambiguity on the high end or the low end of cost?

A. I think that's the risk of the voluntary, non-audited survey.
Q. So would you say the other risk of a voluntary survey is the sample bias? In other words, if you have a low cost plant, you maybe choose not to participate?
A. Correct.
Q. So from that perspective going with the -- before there's a mandatory survey going on and could present the real danger of doing too much?
A. Correct.
DR. BOZIC: Thank you very much.
THE COURT: Additional cross other than AMS?
CROSS-EXAMINATION
BY MR. MILTNER:
Q. Good afternoon. I'm Ryan Miltner representing Select Milk Producers.
A. Good afternoon.
Q. Are you at all familiar with Agri-Mark's position in the last Make Allowance hearing?
A. Yes.
Q. Okay. I believe that Mr. Wellington then had suggested that the Make Allowance be set at one of two levels: A level that would allow a minimum of 80% of producer milk used by Class III and IV plant to cover their costs, or a level that would allow a minimum of 25% of the producer milk volume used by Class III and IV plants in any specific Federal Order pooling at least 4 billion pounds of milk to cover their costs?

A. Without having that in front of me, you lost me a little bit.
Q. Okay.
A. But I'm going to trust that you are looking at that.
Q. I am.
A. Okay.
Q. My question is, does Agri-Mark have a position now as to where within the universe of plant cost data USDA should draw the line and say, this is what the Make Allowance is?
A. We do not have a position today.
Q. Okay. Okay. Mr. Jacquier had some questions that he deferred to you.
A. I love when that happens.
Q. So I think some of these questions you have answered, so I'll just tick through those. Hopefully they will be simple.
Agri-Mark did participate in Dr. Stephenson's study in 2018 or so, as well as the update last year?
A. Correct.
Q. And you participate in National Milk surveys, correct?
A. Correct.
Q. The West Springfield plant, that's your butter/powder plant, correct?
A. Correct.
Q. It does produce a certain amount of bulk salted

butter; is that correct?
A. Yes. It does.
Q. Okay. And as far as the powders that it produces, you have mentioned nonfat dry milk.
Does it produce any other milk powders?
A. No.
Q. Of the volume of butter that is produced at Springfield, is it predominantly bulk butter or predominantly butter for consumer sale?
A. I don't have that breakout in front of me.
Q. Does Agri-Mark report to the NDPSR nonfat sales and butter sales from that plant?
A. Nonfat sales only.
Q. Okay. Does -- do you report any butter sales to the NDPSR?
A. No.
Q. The Middlebury plant where you process whey, first, is that the only plant at which Agri-Mark processes whey?
A. Yes.
Q. Does it produce dry whey?
A. Yes.
Q. Is that reported to the NDPSR?
A. Not that I'm aware.
Q. The Chateaugay plant produces 40-pound blocks and 640-pound blocks?
A. Correct.
Q. And it also produces Cabot cheese that would be

more sold at retail, correct?
A. Yes.
Q. Does it also produce milk under the McCadam brand?
A. Yes.
Q. And does that plant produce predominantly commodity cheese or predominantly consumer cheese?
A. All three of our cheese plants produce a mix of commodity and branded. And so that -- what is determined to go branded versus commodity depends on the quality of that cheese.
Q. Okay. The Springfield plant, you list it as a non-pooled supply plant?
A. Correct.
Q. But I believe your chairman said that all producer milk from Agri-Mark is producer milk pooled on the order --
A. Yes.
Q. -- is that -- both of those are correct?
A. Yes.
Q. Would the Springfield plant become a pooled supply plant if the Make Allowance changes proposed by National Milk are adopted?
A. That's not an analysis that I have been a part of.
Q. Okay. Now, these all have to do with your statement.
And I forget if this was Ms. Vulin or Mr. Rosenbaum, but you looked at the Make Allowance proposed increases from both National Milk and from IDFA,

and you were asked whether those changes respectively would cover Agri-Mark's cost of production. You answered that under both proposals, some -- for some commodities it would cover Agri-Mark's costs, and for some it would not; is that correct?
A. That is correct.
Q. When you were looking at the IDFA numbers, were you looking at their year one numbers or their year four numbers?
A. I was looking at their year one numbers.
Q. Okay. Would your answer be different in year four?
A. Yes.
Q. And in year four would Agri-Mark have all of its costs covered for every commodity?
A. And then some.
Q. This was Ms. Vulin's questions to you. She asked and compared the current Make Allowances, and she increased them by the amount of the percentages that were reflected in your statement. I didn't --
A. Can you say that one more time? I was looking at --
Q. Sure. She looked at the current Make Allowances, and I think she increased them by the percentages you had indicated in your statement.
A. Yep.
Q. Okay. I did something a little different. I took the numbers that Agri-Mark requested the USDA adopt in

2007, and I increased them by the same amounts. So I want to go through those with you if I --
A. If I -- by the -- in the same amount with what?
Q. By the 23% and 17% you had described.
A. Okay.
Q. So for cheese, for protein, Agri-Mark had requested $0.2154, and I multiplied that times 1.23, and I came to $0.2649.
A. And you are using -- what is -- what are the numbers that you are using? What we provided in the two thousand --
Q. The last time that Make Allowances were updated, so it was a 2007 hearing and a 2008 decision.
A. Okay. So what we put on the record?
Q. This is what Agri-Mark put in their brief --
A. Okay.
Q. -- and said, we would like this.
A. Okay.
Q. So would $0.2649 cover Agri-Mark's cost for cheese?
A. Yes.
Q. For butter, Agri-Mark requested $0.1725. I multiplied that times 1.17, and I arrived at $0.2018. Would that cover Agri-Mark's costs for butter?
A. Yes.
Q. For nonfat dry milk, Agri-Mark requested $0.1782, which I multiplied times 1.17 and arrived at $0.2085. Would that cover Agri-Mark's cost of production?

A. No.
Q. And for whey, Agri-Mark requested $0.2080, which I multiplied times 1.23, and arrived at $0.2558. Would that cover Agri-Mark's cost of production?
A. Just about.
Q. Okay. So, first of all, I appreciate you being so forthright with those costs because, you know, you are under no obligation to do so. So I appreciate that.
But I think as I map that out, the numbers you provided at 23% and 17% are pretty darn close to what you had related on your cost increases; would you agree?
A. Yes.
Q. Would you -- do you have an opinion as to whether Agri-Mark's cost of production for the four surveyed commodities are higher or lower than a national average?
A. What are you assuming is the national average? Or you are asking for my opinion?
Q. I don't know what the national average is.
A. Based on what I know at our own plants, I do have an opinion of whether we are in line or not in line, but I'll leave it at that.
Q. Okay. Mr. Rosenbaum asked a series of questions about how long it may take us to get from today to an audited mandatory cost survey. Without belaboring the specifics, which I did with the witness a week or so ago, Agri-Mark knows fully well that there's a gap between now and when and if that survey happens, correct?
A. Yes.

Q. And that timeframe is a black box, right?
A. Yes.
Q. But Agri-Mark in the interim, you want to make your -- you want to make money for your producers, right?
A. Yes.
Q. You would like your -- you would like your plants to be profitable, or at least not hemorrhaging cash, correct?
A. Correct.
Q. And so you're comfortable, given the math we just went through and knowing that we have got a black box in front of us, that you are comfortable with whatever that that delay might be? You are -- you sit in full support of Proposal 7?
A. As I think I said to Mr. Rosenbaum, or maybe it was you, I do -- it's a risk.
Q. Right.
A. But it is a risk that we're willing to take because we do feel very strongly that audited mandatory surveys are the best way to go. And historically we have always gone through that same process of hearing and making sure that we call a hearing and go through this process every time we do this.
Q. I appreciate that very much. Thank you. I think I have just one more question on a couple related questions to ask.
In a -- in responding to Mr. Rosenbaum, you made an acknowledgement that if National Milk's Proposal 7 were

adopted, that the cost of production for a commodity plant will materially exceed -- I'm sorry -- you acknowledged that for a commodity plant, their cost of production will materially exceed the Make Allowances in Proposal 7.
Is it your intent to acknowledge that?
A. Can you please restate that?
Q. Sure. The acknowledgement that I thought I heard was, if Proposal 7 gets adopted --
A. Uh-huh.
Q. -- the actual cost of production for the plants making commodity products will exceed the Make Allowances.
A. I'm speaking specifically for us, some of those commodities.
Q. Some of those commodities. Okay. So not all.
A. No.
Q. And given that you have testified your costs of production are in the range of other plants, wouldn't that mean that there are plants that will have higher costs than Agri-Mark and lower costs than Agri-Mark, correct?
A. I believe so, yes.
Q. So if we adopt -- if USDA adopts Proposal 7, there will be plants with a cost of processing lower than the Make Allowances in place, correct?
A. Most likely.
Q. And there will be plants with a cost of processing higher than the Make Allowances, correct?
A. Most likely, but I don't know what those are, of course.

Q. But those are reasonable conclusions to draw based on your professional experience, what you know about Agri-Mark's costs, correct?
A. Yes.
MR. MILTNER: Thanks. That's all I have.
THE COURT: Further cross?
Okay, Mr. Rosenbaum.

CROSS-EXAMINATION

BY MR. ROSENBAUM:
Q. Steve Rosenbaum for the International Dairy Foods Association again.
I'd like you to assume with me something that I think the record establishes, which is that the witness for Land O'Lakes testified that when he looks at Land O'Lakes' costs in 2022 compared to 2008, those costs have gone up by over 70% looking at butter and nonfat dry milk. Okay?
Do you have -- assuming those numbers are accurate, do you have any explanation why your numbers would be so much lower?
A. All I will speak to is what I know about our cost numbers. I have no visibility into Land O'Lakes' numbers.
Q. Now, let me -- let me -- put yourself in a situation of a company that operates processing plants as you do, except it is a proprietary, not a co-op owned company. Okay?
So if your plant is regulated by the Federal Order system, you -- there is a regulated price for Class III

and IV milk, but you are, as a co-op, entitled to engage in reblending and actually pay a lesser amount to your farmers, correct?
A. Correct.
Q. And so if the current Make Allowances, because they are too low, are causing your plant to operate at a loss, which apparently at least some of that is true for some of the commodities you are making, what you can do is basically deduct those losses in the farmers' paycheck and end up paying them less than the minimum regulated price for the milk, correct?
A. Correct.
Q. And that's just not just hypothetical, that's what you actually do, correct?
A. Correct.
Q. Now, if you are a proprietary plant pooled on the Federal Order system, you are required by law to pay the minimum price, correct?
A. Correct.
Q. And you are not -- there's no reblending permitted, correct? I mean, you have to pay that price, correct?
A. As far as I'm aware.
Q. Okay. And so if that price is simply -- start that question again.
So if the minimum milk price for that proprietary handler is such that -- start that question one more time.
If the Make Allowance, because it's too low,

results in a milk price that is so high that the proprietary handler can't cover its costs and make a profit based upon what it is selling the product for, it just has to eat that loss, correct?

A. Correct, if that's excluding, you know, any premiums or anything like that in the conversation.

Q. Well, I take it the fact that you are taking deductions from your farmers for the losses your plants suffer would be an indication that if you are able to gain premiums in the marketplace today, they are not sufficient to avoid --

A. I didn't make that statement in regard to our own situation. I was going with your proprietary example.

Q. Okay. But if -- if their finances are comparable to your own, there's not enough -- start the question again.

I mean, assuming you're selling the commodity for the average price at which the commodity is being sold, and that the $0.20 Make Allowance is not -- on cheese, for example, is not sufficient to cover your cost, and you're required to turn over to the farmer, as a matter of law, for his or her milk whatever you sold that cheese for, except you get to keep $0.20, you are going to be in a loss position, correct?

A. Correct.

Q. And I mean, in effect, aren't you able to, through reblending, to a certain extent, reset the minimum price of milk that you have to pay, but proprietary handlers

don't have that capacity?
A. Yes.
MR. ROSENBAUM: That's all I have.
THE COURT: Anyone else?
AMS.

CROSS-EXAMINATION

BY MS. TAYLOR:
Q. Good afternoon.
A. Good afternoon.
Q. Thanks for coming to testify today.
In your statement you talk about how the manufacturing allowances are too low and that this causes manufacturers to solve this with individualized solutions, is the words you used.
So I wonder if you could talk more about how Agri-Mark has worked -- what individual solutions that you have had to implement that kind of balance the needs of the -- financial needs of your manufacturing side of the house and also your member pay prices on the other side.
A. Yes. So due to inadequate Make Allowances, because we have not adjusted for those in formulas and, you know, adjusted for that at a regulated price, Agri-Mark is having to adjust that in an unregulated price via milk check deduction.
Q. And I think I heard it from an earlier statement, or in answer to a question, you talked it is your opinion that more of that -- more of the manufacturing cost should be reflected in the regulated price than currently, but it

is not your position necessarily that it has to cover all plants.
A. We are supporting the National Milk proposal in its entirety, and I have acknowledged that for us that will not cover all of our costs throughout our organization with all of our commodities.
Q. And throughout your statement you talk about how the current situation creates disparities among producer pay prices between -- and what I took as your answer to a different question, was it's not only between producers that are co-op members and direct shippers, but it is producers of co-op A versus co-op B?
A. So depending on where you stand in the marketplace and what products you consume -- or excuse me -- what products you make, so for us being a manufacturer of Class III and IV primarily, where those Make Allowances are really impactful for us, that puts us in a position where because our farmers have invested in those manufacturing assets, we are not able to recoup those, and our paychecks as compared to our neighbors can look a lot different at times.
Q. And I think you talked some about how you all had put plant investments into West Springfield and the Chateaugay plants?
A. Yes.
Q. And I was wondering if there was any -- have you in your other plants looked to put or have put investments in there to gain some efficiencies?

A. Yes, absolutely. So as I think was mentioned earlier this morning, we are continuously looking at current Make Allowances as our benchmark and looking at any sort of investment projects that will allow us to perform better compared to that benchmark.
Q. You talked about how your one plant was -- about West Springfield, has a long history of being a balancing plant, but recently pretty much runs at full capacity.
Can I infer from that that your per unit cost at that plant then, maybe that accounts for some of your lower than other costs that we have heard in testimony over the past --
A. I think that that's a fair statement. So in the past, when that plant has operated as more of a traditional balancing plant, we would -- our cost per unit would have looked worse than what they are today. We would -- on one hand, we would love to have West Springfield return to a traditional balancing plant from a milk utilization standpoint, but on a Make Allowance standpoint, that does benefit us.
Q. Yeah. And so when it used to run at -- provide more of its balancing service, can you -- do you know about what the range was on your plant capacity during the year?
A. I don't have that off the top of my head.
Q. Okay. I'm reading questions that many people sent me, so I'm trying to make this logical.
A. Take your time.

Q. So for the powder plant, though, it's running at capacity now, not because of demand but more of a supply response?
A. Yes.
Q. You talked about how in the future, however, as additional capacity comes on, that's when you expect it to return to its balancing function.
Is there additional plant capacity expected in the Northeast, or you are just saying generally?
A. We have seen announcements for additional capacity in the Northeast. In addition, our Chateaugay projects that we have referenced earlier today is going to increase some capacity as well. And it would be our hope that in the future, we would see more capacity beyond that come into the marketplace as well.
Q. So I don't know if you listened to any of the testimony last week --
A. Yes.
Q. -- but we did ask some representatives of other co-ops, kind of in the grand scheme of things, as pretty much all of you have testified to, is the market has adjusted to the fact that Make Allowances are lower than what you believe they should be and that increasing makes would then from a co-op perspective result in different reblending. Maybe the deductions wouldn't be as low.
And so I'm just bigger picture trying to gather your thoughts on how this isn't just a zero-sum game.
A. Again, I'll say that, from our perspective, the

importance of these hearings, not only from a Make Allowance perspective but all the other proposals that are being heard as well, the intent of all of these is to derive what a true market value is for milk. Right? And that that market value be part of the regulated price. And that's really, you know, why we're here, why we want the Make Allowances to be adjusted and why we want some of these other formulas to be adjusted as well.
Q. And that market value reference, and what you mean by that, would be the basis for the minimum price, which is what --
A. Yes.
Q. -- Federal Orders are supposed to do?
A. Yes.
MS. TAYLOR: That's it from AMS. Thank you.
THE COURT: Anything else?
Redirect.

REDIRECT EXAMINATION

BY MS. HANCOCK:
Q. You were just talking with Mr. Rosenbaum about proprietary plants and minimum pricing. It's also true that for those proprietary plants, they could elect not to pool their products?
A. Correct.
Q. And if that's the case, then they are not regulated by the Federal Order's minimum price and they can pay what the market will bear.
A. Correct.

Q. Thanks.
MS. HANCOCK: That's all I have, your Honor. We would move to admit Exhibit 170.
THE COURT: Any objection?
Exhibit 170 is admitted into the record.
(Thereafter, Exhibit Number 170 was received into evidence.)
MR. ROSENBAUM: Your Honor?
THE COURT: Yes.
Okay. There's a contention she opened a door there or something different here?
MR. ROSENBAUM: It is going to be something different, your Honor. It's going to be based on that.

RECROSS-EXAMINATION

BY MR. ROSENBAUM:
Q. I mean, as you say, in Order 1, where you are more or less you are in or you are out, correct?
A. Correct.
Q. And obviously, a manufacturing plant, if they are in, one reason to be in is, of course, they get to share, to the extent it is -- it exists, the difference between the Class I price and the manufacturing price, correct?
A. Correct.
Q. And that's lost if you -- if you drop out, correct?
A. Correct.
Q. And how does that -- how does that affect the competitive situation of the proprietary plant versus the

co-op plant in terms of attracting a milk supply if they don't have the benefit of the shared Class I proceeds?

A. Well, I mean, there's -- you can think about it the other way too. Right? So if you have the ability to pool or you don't have the ability to pool, you know, that's a competitive advantage or disadvantage as well.

Q. But a co-op can pool and then participate in the Class I proceeds and then pay its farmers as it sees fit, correct?

A. Correct.

MR. ROSENBAUM: That's all.

THE COURT: Any redirect?

MS. HANCOCK: Yes, your Honor.

REDIRECT EXAMINATION

BY MS. HANCOCK:

Q. And just to be clear, that disincentive to depool limitation, to the extent it exists in Federal Order 1, that's the only Federal Order where it exists?

A. It is very -- we are highly disincentivized to depool in Federal Order 1.

Q. Okay. And you are not aware of that same situation in the other Federal Orders?

A. My understanding is it is the most strict in Federal Order 1, and that is a tool that, for a Class III manufacturer in Federal Order 1, we don't have that others do.

Q. And to the extent that you as a cooperative can engage in any kind of reblending, it also comes with the

responsibility of taking all of your members' milk as well; is that right?
A. We have the responsibility to take all of our members' milk, and we also have the responsibility to pay a competitive price.
MS. HANCOCK: Your Honor, that's all I have. We move to admit Exhibit 170.
THE COURT: I think we did that already. 170 is in the evidentiary record.
MS. HANCOCK: And at long last, we would like Mr. Bauer to join the stand.
THE COURT: Very good.
Ma'am, thank you for coming.
Welcome back. Please raise your right hand.
PAUL BAUER,
Being first duly sworn, was examined and testified as follows:
THE COURT: Your witness.
DIRECT EXAMINATION
BY MS. HANCOCK:
Q. Good afternoon, Mr. Bauer. Thank you for making the return trip back out here today. I appreciate that.
You're here today to testify for a second time, this time on Make Allowances; is that right?
A. That is correct.
Q. And did you prepare a testimony identified as Exhibit NMPF-15 for your Make Allowance testimony?
A. I did.

Q. Before we dive into this, I want to maybe expand on some of the experience that you gave us previously.
Have you been doing costing work on cheese in your -- throughout your career?
A. I have about 30 years of experience in cost accounting in Federal Order 30 and different varieties and types of cheeses.
Q. Okay.
MS. HANCOCK: Your Honor, I -- if we could mark this as the next exhibit number. I believe we're at 171.
THE COURT: That's what my -- yes. Mr. Bauer's NMPF-17 (sic) is marked 171 for identification.
(Thereafter, Exhibit Number 171 was marked for identification.)
MS. HANCOCK: Thank you.
BY MS. HANCOCK:
Q. And, Mr. Bauer, would you proceed with providing us your testimony in Exhibit 171?
And then just, if you weren't here, we're just being extra mindful about reading slow for the court reporter.
A. I will.
Q. But not too slow we should say.
A. I know it's not going to make a horse-a-piece, but really it's Exhibit 15, not 17, your Honor, NMPF.
THE COURT: I'm sorry, I picked up the wrong document. My mistake, yes.
MS. HANCOCK: I didn't even --

THE COURT: NMPF-15 is Mr. Bauer's statement, and it's marked 171.

MS. HANCOCK: Thank you.

THE WITNESS: I'm here in support of National Milk's change to the Make Allowance of $0.24 for cheese and $0.23 for whey.

Hello, I am Paul Bauer, CEO and General Manager since 2008 of the Ellsworth Cooperative Creamery. Ellsworth has a barrel plant and a sweet whey drying plant. In 2022, Ellsworth produced 70.9 million pounds of cheese through its barrel plant and processed 33.7 million pounds of sweet dry whey -- whey solids, excuse me. The total patron pounds for that year were 77 million pounds. We also opened a new cheese plant in 2022 in Menomonie for specialty and block cheese. In addition, the cooperative runs a process cheese plant in New London, Wisconsin.

The ECC (Ellsworth Cooperative Creamery) has the unique position of supplying information to NDPRS on two products, barrel cheese and sweet whey powder. In December of 2022, only 10 barrel plants and 14 dry whey plants reported information to NDPRS. So the cost to convert and make products are very relevant to Ellsworth and the entire classified milk pricing system.

In addition, we have a new block cheddar plant that soon will be reporting to NDPSR as we increase production, and this will help to explain the cost differences in the final packed form of dairy products.

The Ellsworth plant has seen its barrel cheese production cost rise significantly from 2006 levels.

We have a long history at Ellsworth with barrel cheese and sweet whey products, so we have the data from this time period forward. The reason I am using the 2006 time period is that it ties most closely to the last time Make Allowances were surveyed and increased. While the Make Allowance may have increased in 2008, the costs are related to 2006.

Further, I have broken the costs down as it relates to Make Allowance by product to be comparable to Dr. Mark Stephenson survey work study published in 2022. Those groups are supplies (packaging), wages (processing labor), depreciation (return on investment), utilities (utilities) and other (non-labor or non-utilities costs for processing and general administration).

I tracked those costs to those groupings from 2006 forward to the year 2022. The one area that would differ is depreciation, as the survey uses a calculated value for return on assets, whereas I used actual depreciation based on our GAAP accounting.

Barrel Cheese:

Since 2006, our production volume has increased 53% in cheese output to 2022. In 2009, we added a whole milk UF at the start of our process to increase the efficiency of each vat cycle. This accounts for a good portion of our ability to keep production costs where they are today. We are not able to increase production significantly in the future without major investment in cheese equipment, whey processing, and site wastewater needs.

As a recap, our cost of supplies for cheese in 16 years are up 545%. This does represent an accounting change that happened in prior years included in the grouping labeled other costs. This area of costs was up as a result of inflationary pressures. This area covers plastic, cardboard, starter, and rennet. The result is a $0.022 increase per pound.

The next area is wages to make cheese. On a per pound basis, wages are up $0.059 per pound in the 16-year period. This is a 322% increase. Wages include all time worked, vacation, bonus time, plus mandatory benefits like Social Security, unemployment, etcetera. It also includes all the direct expenses related to health care. Since we are self-insured, these can be variable per year.

The amount of depreciation for cheese production represents the direct capital costs to expand cheese output in 2009 and a portion of improvements in wastewater and site improvements proportion to cheese production. In 16 years, on a per pound basis, this was up 77%. This change is equal to $0.002 per pound. Since Ellsworth has an established plant, our depreciation is very low.

The cost for utilities to make cheese has increased 33% in the 16-year time period. We have used several methods to reduce costs in our plant. One is using third-person marketers to reduce gas cost and its variability. The pre-purchasing of natural gas and the basis (space in the pipeline) will take spiking costs out of the gas purchases and the delivery basis charges. Since we are a very stable consumer of natural gas, we can, to a high degree, predict consumption to avoid major swings in gas prices.

The second item is electrical rates, which we pay a very low rate because we have a steady load of electrical needs. Ellsworth gets very low rates since we have steady electrical loads between peak loading and low peak loading. These two factors keep our utility costs low to make cheese. In that period, our cost per pound went down $0.004.

The last grouping for cheese is other. This is somewhat the catch-all for all items that did not fall into the other groups. We have changed our accounting process so that the larger supply expenses are not placed in this category. As a result, the other cost for cheese processing was up 10% in 16 years. On a per pound basis, it went down $0.011.

In total, our costs, as stated, in our plant to make barrel cheese have gone up $0.064 per pound in 16 years. We can support the National Milk Producers Federation proposal to increase the Make Allowance to $0.24 per pound on cheese as it is a starting point to collect better cost data for future increases in the Make Allowance.

Dried Sweet Whey:

Our dried sweet whey side of the business production has only increased 6% in 16 years. The reason for this is in 2006, Ellsworth stopped purchasing whey solids from other companies and started to process only its own whey as we increased cheese production. As a result, we do not have increased whey capacity at the plant.

Using the same categories as cheese and using the groupings of Dr. Stephenson's survey, we have supplies, wages, depreciation, utilities, and other to track costs.

In the supply category, costs are up 102% as compared to the prior 16 years. On this side of the business, like the cheese side, had an accounting recording change, so some of the supplies were listed in 2006 as other expenses.

Whey has gone through a change in packaging options compared to 2006. The chart below shows the change in production to include condensed whey solids, which now represents 23% of production in 2022. The packaging shift will lower the spend for packaging material. The supply costs in total for this time period went up $0.005 per pound.

Further, the change in packaging material (bags and totes) was a positive change of $0.004 per pound, and the change in makeup of product shipped was a negative $0.0029. So the cost of packaging material less the change in final packaging mix increased by $0.0011.

Wages for producing dried whey was up 270% in 16 years. On a per pound basis, this is an increase of

$0.043 per pound. Again, wages include all time worked, vacation, bonus time, plus mandatory benefits like Social Security, unemployment tax, etcetera. As with cheese, it also includes the direct expenses related to health care. Since we are self-insured, these can be variable per year.

Dried whey depreciation has increased 67% in this time period. This is a $0.003 increase per pound. Again, we have an established plant and as such do not have a lot of depreciation. We currently use GAAP accounting on depreciation. The amount of depreciation is not sufficient to replace the assets we have in place, which further supports the need for better costing information from the USDA.

For utilities, we have pre-purchased gas and limited electrical costs through various business tools that keep our costs low. We have seen a 37% increase in total costs and a per pound increase of $0.003.

The other grouping of costs has gone up 1% in 16 years. This has a decrease in cost of $0.001 per pound. This again represents a change in accounting some costs as supplies in 2022 that were recorded as -- supplies in 2022 that were recorded in 2006 as other.

In total, the cost to produce dried sweet whey has gone up $0.054 per pound in 16 years. We can support the National Milk Producers proposal to increase the Make Allowance to $0.23 per pound on dried sweet whey as it is a starting point to collect better cost data for future increase in the Make Allowance.

Issues In the Make Allowance Discussion:

In working to collect our plant data, it helps to highlight some of the areas where better methods need to be implemented in the dairy reporting of complex information. Since not all of us do cost accounting in the same fashion, it can lead to different values on a per pound basis.

The process of collecting information differently than other companies is fine because the internally collected information can be used inside the organization. However, it does become an issue when trying to aggregate information to adjust a Make Allowance.

As an example, where do the costs of supervision or quality supervision to make cheese get grouped? Further, where does labor to load the truck or take samples get placed for the Make Allowance values?

Without clear guidelines as an industry, we cannot get costs that are similarly allocated when a plant has mixed products that are not included in the survey work.

Limitations of Using The 2018 Survey Results Compiled By Dr. Stephenson:

Another issue in the survey work is the cost per end product. There are two very different requirements to make cheese when you have a barrel and a block plant. They are not the same product, yet they are lumped in the same cost survey as they were in Dr. Stephenson's work.

To be accurate, this needs to be tracked and then brought to the same level to make accurate Make Allowance cost discoveries. The material packaging costs on barrels and blocks are very different. On a per pound basis an additional cost of $0.03042 per pound is needed for block production (see chart below of actual costs of materials for Ellsworth and its Menomonie Block plant).

This difference alone makes the Make Allowance for block cheese up by 14% of the total cost, just on the required material. This does not include the extra handling of blocks compared to barrels.

At present, we collect only one set of information on the Make Allowance which does not distinguish between barrels, 640s, or blocks. Since we use end product pricing, less one Make Allowance, it would not support block cheese manufacturing as it would underrepresent their costs.

It would be important for future survey work to find the cost of packaging by end cheese type being produced. This will allow for the end product price less Make Allowance to reflect actual costs to make each product. This will assist in providing long-term market conditions to allow the market to have dairy assets in place for processing milk and thus provide orderly marketing of milk.

The Ellsworth Cooperative Creamery can support the adjustment to the Make Allowance as proposed by National Milk Producers Federation and the creation of a survey to update the Make Allowance via a regulated mandatory reporting.

DIRECT EXAMINATION

BY MS. HANCOCK:

Q. So I just want to cover a couple of your numbers because I think when we were reading them, some of the numbers didn't match up with what was in here, and I just want to make sure that we say them correctly. I'm going to do my best to catch the ones that I caught.

If you look at page 3 of your testimony, the cost for utilities to make cheese has increased. In your testimony you have 37%, and I think you said 33% when you were reading it.

Is that 37%?

A. 37 is accurate.

Q. Okay. And then I think on the same page, when we were talking the next full paragraph down, last sentence, it says the other cost for cheese processing was up 10% in 16 years, and on a per pound cost it went down -- did you mean $0.014 cents?

A. Correct. Or a dollar-point-oh-14, depending how you want to say it.

Q. Okay.

A. It is not as smooth to say dollar-point-oh-14, so --

Q. Well, point -- but you mean point-zero-14-dollars or point -- sorry -- .014 cents is --

A. Correct. 1.4 cents down.

Q. Okay. Let's not convert it. Let me do this. Let's just put it in terms of cents, and then we can make

sure that it is accurate.
As it's written there, that one is accurate where it's .014 cents -- or $0.014 -- I'm sorry, I'm saying it backwards. It's my problem, and this is why I'm not hearing it correctly. $0.014 is 1.4 cents.
A. Are the same number.
Q. Yeah. Okay. I'm so sorry. Goodness gracious. If I say it enough times, it will come out in my head.
And then on the next page, on page 4, it is $0.005 per pound. And this is in the supply cost and total for this time period, in the middle of that.
A. Went up, it would be .5 cents per pound.
Q. And then on page 6, on a per pound basis, an additional cost of $0.03042 per pound.
A. On page 5?
Q. I'm on page 6.
A. It -- the difference in cost in packaging is 3.042 cents per pound.
Q. Okay. And then if we could just take a step back. If you look at your total costs that have increased from 2006 to the present on cheese, what's the total percentage of cost increase that Ellsworth has experienced since 2006?
A. It's approximately 45%.
Q. Okay.
A. We have historically produced below the Make Allowance.
Q. Okay. At what point did Ellsworth cooperative,

if -- let me back up.
So if Ellsworth had historically been producing below the Make Allowance, at some point did its cost of production exceed the Make Allowance?
A. In 2022, we are at or above the Make Allowance.
Q. Is 2022 the first time, on average, that Ellsworth had exceeded the Make Allowance that had been set back in 2006?
A. It is.
Q. Okay. So --
A. For both whey and cheese.
Q. From that, from the time that it was calculated using those 2006 numbers, all the way up until two thousand -- through 2021, Ellsworth was able to produce below that Make Allowance?
A. That is correct.
Q. And that's the goal, right, because that's how you can make -- add to your profits; is that right?
A. That is correct.
Q. Okay. And so it's only been in 2022 that you're at or exceeding that Make Allowance number?
A. That's correct.
Q. Okay. You talk about your barrel production here, and you earlier had provided some testimony on the barrel elimination proposal that National Milk has put forth.
After your testimony, Edge had presented a compromised position or an alternative position. Are you familiar with what I'm referring to?

A. I am. I have read that.
Q. And how do you understand Dr. Bozic's proposal to work?
A. It's basically using a method or some way to limit the impact of barrel cheese into the formula. However, the problem becomes is that barrels are not a substitute for block cheese, which is what we're -- what the system has been based on. And plus or minus a few percentage points, 90% of the cheese is priced on the block market.
So no matter how you look at it, barrel manufacturers in Federal Milk Marketing Orders are subsidizing other producers of cheese, the other 90%. It's no different than the equivalent of using, in modern terms, child labor to make an iPhone and saying, we're going to take and make less child labor to make that iPhone. If it's wrong, it's wrong. And it's wrong to include barrels in the calculation and have those producers suffer through that consequence.
I also heard testimony from another cooperative, that makes barrels, they are not against the removal, they are scared of the future on how to price barrel cheese. And that will come. There are other methods and examples in the industry.
But we can't be -- if it's wrong that it was included, in today's environment, and how it has changed, and how the lens looks at it now, then we need to get it out of the legislation. Making it a permanent form, even at a lesser percentage, still makes it wrong.

Q. Okay. So do you believe that the weighting -- and maybe this is obvious in what you said already, but I want to unpack this a little bit more.
You understand that the weighting he has proposed is based on the total -- weighting the production amounts?
A. Weighting a wrong number doesn't make it better. It lessens the impact, but it's still wrong. I -- it doesn't matter if it's 1% or 2% or the 35% that was proposed. It's still wrong. It institutionalizes a problem within the system. It's just like saying, it is okay, my iPhone only has 1% of child labor in it. It is still wrong.
Q. Okay. So you don't believe that having a weighted -- a weighted number based on the actual volume of production would solve the concerns between the spread between barrels and block pricing?
A. It would institutionalize it and continue it with the only -- right now, when you talk to buyers, it's like, well, that's part of the price formula. They have institutionalized that deficit, and it is not going to change until that's taken out of the system. I spent many years working with others in the industry, and the root cause comes back to it's part of the Federal Milk Marketing Order system, so we can't do anything with it. Well, maybe we should take it out. We should take it out, at 100%, and then we can go on. It does not -- if it doesn't do anything to the industry, for barrel manufacturers like Ellsworth. It will not decrease our

income. We still will get the income from the barrel cheese sales. Everyone that makes barrel cheese. The only way is to get it out of the institutionalized system of being part of the price discovery system, when we have a chance to move barrel cheese to be priced off the block market. And I know that's beyond the scope of the Federal Order system, but by them including it, it does legitimize it.

Q. And -- and you had just talked -- I mean, you -- I think when you were here to testify previously you talked about that when you are producing barrels, there is usually a customer on the other side that is already pre-determined by the time you have -- by the time you have decided which volume of barrels you are going to produce?

A. Correct.

Q. And is that what you mean when you say, there's a buyer on the other side of these deals, and so you know how to build that pricing into -- or you know what the pricing is going to be because it's a negotiated arm's length transaction for you?

A. In advance, based off of third party market, correct.

Q. And then I think earlier when you were giving us your reaction to the alternative proposal, you had included in there that there had been another barrel manufacturer who had testified about some of the concerns that he had with if -- if you remove barrels, he was

concerned about whether he would be able to continue because he wasn't sure how his barrels would be priced.
Do you remember that testimony?
A. I do.
Q. And you don't share those concerns based on what you have said?
A. His income, as his cooperative, if the market still stays, which I hope it doesn't, his income will stay the same, because that market may or may not exist. The upside -- there's only upside to that manufacturer and all manufacturers in the Federal Order system to get more value, because he will get more value from the pool, potentially, if they do pool their milk, or they have the ability to renegotiate and reprice those third-party deals.
Q. So you don't have the same concerns about whether the barrel pricing will be affected if barrels are removed from the Class III pricing formula?
A. Well, the fear of the unknown is -- is somewhat there. But I know what we have today costs my producers a lot of money. And since 2017, I totaled it up earlier, it is $33 million. We can't sustain $33 million losses. If we continue at this, we'll stop -- either cease doing production or not make barrel cheese, and barrel cheese will not be produced in the Federal Milk Marketing Order. So either fix the -- get the -- get it out of the system so we can change, but if we institutionalize it, it's going to go away in some way, shape, or form because we

can't sustain those losses forever.
MS. HANCOCK: Thank you, Mr. Bauer.
Your Honor, at this time we would make him available for cross-examination.
THE COURT: Dr. Bozic.
Are we due for a break or -- did you have a question about the order of cross?
MR. ROSENBAUM: No. I was really rising to say I'm happy to proceed, but it's been an hour and a half if we want to break first.
THE COURT: Yes, it has been -- I think it's time for a break. Let's come back at 3 o'clock.
(Whereupon, a break was taken.)
THE COURT: On the record.
Mr. Rosenbaum.

CROSS-EXAMINATION

BY MR. ROSENBAUM:
Q. Steve Rosenbaum for the International Dairy Foods Association.
Mr. Bauer, let me just start with a point that actually is sort of the point you end your written testimony, Exhibit 171, on, which is your section called "Limitations in Using the 2018 Survey Results Compiled By Dr. Stephenson."
Do you see that?
A. I'll get there. Yep.
Q. And you -- you start by saying, "Another issue in the survey's work" -- and that's referencing

Dr. Stephenson's work, correct?
A. Correct.
Q. -- is the cost per end product. There are two very different requirements to make cheese when you have a barrel plant and block plant. They are not the same product, yet are dumped -- lumped in the same cost survey as they were in Dr. Stephenson's work.
Do you see that?
A. I do.
Q. And is that based upon your assumption that when Dr. Stephenson reports cost on a per pound basis, he is including both 40-pound blocks and 500-pound barrels?
A. I'm not exactly sure what was included in the 2006 work because there was only ten plants included. What I can imply from his work is that when you look at the cost per pound on packaging, there is a very significant difference between the high cost plants and the low cost plants, meaning the top five and the bottom five. And in that work, the differences almost equal to the packaging costs. So there really was no definition of what plant was being surveyed within the cheese framework.
Q. But you reference here specifically to his 2018 survey, which I assume is a reference to what ends up being his 2021 report, correct?
A. That is correct.
Q. And Dr. Stephenson will testify, and if he explains that although he gathered information regarding 500-pound barrels, but in fact, his cost data only relates

to 40-pound blocks, am I correct that the criticism you have lodged on page 6 goes away?
A. I would say that's incorrect based on the data that was supplied on the low cost plants. The value of packaging is not sufficient to cover the cost of material to put it into a 40-pound block. See, there could be a 640 plant in there. There could be anything. It is just not determined. Which goes to the point, either Dr. Stephenson was given -- or people volunteered information in that survey, and that's just one of the implications that we're having trouble with reconciling.
Q. Didn't the survey ask that plants specifically identify whether they were 40-pound blocks versus 640-pound blocks versus 500-pound barrels?
A. I don't know that specifically but -- but in the summary of information, there was no distinguishing what was what.
Q. So let's assume that Dr. Stephenson will explain that, yes, he gathered information as to all three varieties, that is to say 40-pound blocks, 640-pound blocks, and 500-pound barrels, but when it came to reporting costs, he limited himself to 40-pound blocks. Wouldn't that eliminate the criticism you've made on page 6?
A. If he testifies to that, it may. But I still will stand by the numbers of what it costs to package a piece of cheese in a 40-pound box is not sufficient that was outlined in his survey.

Q. And this will be a clarification. I'm not pointing fingers, and I'm certainly not suggesting you have said anything that you didn't understand to be the case. But he'll explain for us what he actually did, correct?
A. I believe so.
Q. So let's now switch back to the major topic of your testimony, which relates to the cost of your company, correct?
A. Correct.
Q. So let me just start with the bottom line and work my way back a little bit. Okay?
So on page 3 of your statement, which is, as I say, Hearing Exhibit 171, you say that your costs for making cheese have gone up by 6.04 cents since 2007, correct?
A. Incorrect. 6.4 cents, not 6.0 cents.
Q. I thought it was 6.04. Let me just go back and look at the numbers. Maybe I wrote it down incorrectly.
A. I know, they get confusing.
Q. You know, you're absolutely right. I put an extra zero in there. So I'm going to ask the question again.
A. Okay.
Q. Good to have the correction.
On page 3 you indicate that your costs of making cheese have gone up by 6.4 cents, correct?
A. Correct.
Q. And you're aware, I'm sure, that the National Milk

Producers Federation proposal is to increase the cheese Make Allowance by four-point -- I think it is 22 cents; is that correct?
A. I believe it is -- it's 3.97-something. If we round to four, I think we can agree to that.
Q. Okay. So it's -- let's just -- it is by roughly $0.04. Let's use that rough number. That's how much National Milk would increase the Make Allowance, correct?
A. Correct.
Q. So that there would be an -- even with that increase, there would be a shortfall, if you will, of approximately $0.022 per pound of cheese in terms of what it costs you to make cheese versus what the Make Allowance will be?
A. No, sir. We produce -- up until last year, we produced below the Make Allowance.
Q. Well, you are the one --
A. Even though our costs have gone up $0.064, we produce barrel cheese at less than the -- we used to produce it at less than the Make Allowance.
Q. I see. Okay. All right. All right.
But using your increases as a benchmark, the National Milk Producer proposal, in terms of cents, is less than the cost increase you have included -- you have incurred, correct?
A. That is correct.
Q. Okay. And then when it comes to nonfat dry milk, similarly, you have costs of $0.054 per pound, correct?

A. In --
Q. Increased cost of $0.054, correct?
A. Incorrect. You said nonfat dry milk.
Q. Okay.
A. It would be sweet -- dried sweet whey.
Q. Okay. Let me start the question again. Another accurate correction.
You report that your costs of making whey have increased by $0.054 since 2007, correct?
A. Correct.
Q. And the National Milk new Make Allowance proposal would increase the whey Make Allowance by approximately $0.031, correct?
A. Correct.
Q. Okay. And so you have experienced an increase of $0.023 more than -- yes, than the National Milk proposed increase, correct?
A. Correct.
Q. Okay. Now, one thing that -- so that is sort of the bottom line numbers. I would now like to dig in, a little bit, to what actually makes up your numbers, if you see what I'm saying, because you provided some information about that.
So one thing -- and so I want to start by talking about depreciation.
Now, you indicated on page 2, that you -- you tried to track how Dr. Stephenson had grouped various costs in his 2022 report, and you felt you had done so,

except for depreciation where Dr. Stephenson uses a -- I think he calls it economic depreciation calculation, and you are using instead GAAP accounting depreciation as you keep them on your books; is that correct?
A. That is correct.
Q. Okay. So -- and then you give some figures for how much -- how much depreciation has increased, correct?
A. I do, yes.
Q. You have figures both for cheese and for -- and for whey, correct?
A. Correct.
Q. So for cheese, the figure appears at the top of page 3, and you say, in 16 years, on a per pound basis, depreciation was up 77%, which worked out to two-tenths of a cent per pound, correct?
A. Correct.
Q. So if I just do the back calculation as to, well, what must depreciation have been to increase it by 77% only produces two-tenths of a penny, I get that depreciation was $0.0025. Do you see what I'm saying? Is that right?
A. I am not sure I can confirm your math.
Q. Well, what I'm -- the math I'm doing is .77, that's the 77%, times X equals two-tenths of a cent, because you said that your depreciation is up two-tenths of a cent, and that's 77% increase. So I think in my formula, X would tell us what depreciation was before you did the increase. And I get, you know, roughly -- I mean

what I get exactly is $0.00259. So I'm getting roughly a quarter of a penny per pound.
A. Yeah. A quarter of a penny per pound sounds more accurate. And I did my math up here, and I come up with that. You originally had said 2.5 cents, and I thought that was too high, so --
Q. If I said that, I misspoke. I'm sorry. And I appreciate your correcting that. It is -- depreciation was a quarter of a penny per pound, correct?
A. Correct.
Q. I mean that's -- if we -- and that's on your cheese, right? So --
A. If you are asking if we have an old plant, your answer is yes.
Q. You must have a plant that is pretty much fully depreciated?
A. It is.
Q. Okay.
A. We have been in the same spot for 110 years.
Q. Okay. All right.
A. Our building is fully depreciated.
Q. Okay. And I mean, Dr. Stephenson included depreciation way back in his 2007 study, and his average number for cheese was $0.0334 per pound depreciation. Okay?
A. Okay.
Q. We have got documents in the record. People can look at it. But I mean, you -- it's fair to say -- have

extraordinarily low depreciation?
A. Yes, we do.
Q. Okay. And -- okay. So obviously, if there were companies out there that have made substantial capital investments that are being depreciated as we speak, they would end up with cost increases materially more than you're setting forth; is that fair?
A. That is fair.
Q. Okay. And then let's just do the same number for whey.
For whey, you state -- and I believe this is on page -- the bottom of page 4, that depreciation for dried whey has increased 67%, which represents a three-tenths of a cent per pound increase, correct?
A. Correct.
Q. And if I do my back calculation, I compute that means that your depreciation upon which that increase was calculated is just a little more than four-tenths of a cent; is that right?
A. I get the same math.
Q. Okay. And, once again, then, when it comes to whey, your plants are essentially fully depreciated, correct?
A. Ironically, we have actually put millions into them, but they are so depreciated, it doesn't make any difference.
Q. Okay. And once again, if we look back at Dr. Stephenson's numbers from 2007, people -- you know, I

think that report's already in the record -- in that report, the weighted average depreciation for a whey plant was $0.058. Take that as a given.
Once again, you obviously are, for better or worse -- I'm not casting aspersions in any way whatsoever -- but for better or worse, you are unusual in that you really have fully depreciated your plants, and that's not a cost you are incurring, correct?
A. We are fully -- we are nearly fully depreciated on our assets, on our cheese making assets, correct.
Q. And depreciation is, obviously, a line item in the calculation of -- of costs of manufacture, correct?
A. Correct.
Q. Okay. All right. So let me now move on to a different part of your calculations, which is on page 4 as well. And this relates to your Table 1, and I just want to understand the implications of the change in what kind of whey you are producing. Okay?
Namely, in 2006, you had no condensed whey, but today you have 23% condensed whey, correct?
A. Correct.
Q. So in your table you are focusing on the packaging differences between the two, correct?
A. Correct.
Q. And obviously there's no packaging -- well, I shouldn't say obviously -- am I correct there's no packaging for condensed whey?
A. Technically you have a label, but that's about it,

you are correct.
Q. Okay. So had you been using the same packaging styles for whey in 2022 that you had been using in 2006, your costs would be higher in 2022 because they would include more packaging costs, correct?
A. Correct. On the flip side, though, we also receive less revenue for condensed whey. So they -- they pretty much counter one another. But in the essence of the -- of a cost survey, I'm -- all I can report is the numbers that I have.
Q. Not -- and I appreciate your reporting your actual numbers. That's great.
But if you were simply doing a cost of manufacture analysis, which is sort of what a Make Allowance is, you would have had higher costs of manufacture had you been producing the whey and packaging it in the manner you had been doing in 2006 as opposed to what you actually did in 2022?
A. That is correct.
Q. And then the other difference, and tell me if I'm wrong about this, but I believe condensed whey -- condensed whey is not fully dried whey; am I right?
A. You're correct.
Q. All right. So -- which I would think means you have reduced costs now because you don't have to dry it as much, correct?
A. Correct.
Q. And so, once again, if you were drying -- let me

start the question again.
With respect to the 23% of your total whey as of 2022 that is condensed, you have lower drying costs than you would have had had you still been drying that whey and making it a dry whey, correct?
A. Correct.
Q. Okay. And when you condense it to what -- you know, is there a percent associated with that, as to, we condense it to X percent?
A. Well, for travel purposes, you -- there's kind of a sweet spot that -- that works best for our particular products. Other companies can get to a higher percentage, and -- and ours is around that 32%.
Q. Okay. And what is the 32%?
A. 32% solids.
Q. Okay. Meaning that you -- that there is 68% moisture that you haven't taken out; is that right?
A. Well, if you -- to be really technical, dried whey has 1.5% moisture, so less that 1.5%, that would be an equivalent.
Q. Okay. So there's 65.5% moisture that you -- sorry.
A. Of water has not been removed.
Q. 66.5% water that has not been removed?
A. Approximately.
Q. And you obviously have saved that cost, correct?
A. Correct.
Q. So on page 2, I think I know the answer, but I

think to make sure the record's clear, I just want to ask it.
You talk about cheese production volume having increased 53% between 2006 and 2022.
A. That's correct.
Q. Is that limited to your barrel production or --
A. This is only barrel.
Q. Okay. Because you mention elsewhere that you've opened up a new plant and things like that. I assume that that number does not include that new plant?
A. This is only barrel cheese production.
Q. I assumed that was the case, but I just wanted to make sure that was right.
MR. ROSENBAUM: That's all I have at this time. Thank you.
THE COURT: Further cross?
CROSS-EXAMINATION
BY MR. MILTNER:
Q. Good afternoon, Mr. Bauer.
A. Good afternoon.
Q. Ryan Miltner representing Select Milk Producers.
On the first page of your statement you describe both the volumes of production and your -- the volume of milk that is produced by your cooperative's patrons.
Does the plant, the barrel plant, only take milk from cooperative patrons?
A. Up until -- for the collection of this data, the answer is yes.

Earlier this year, we were able to purchase some outside milk. I believe that was in Maine. We took on a little -- May or June we took on a little bit of extra milk.
Q. Does milk from the cooperative's patrons regularly get delivered to plants that are not Ellsworth processing plants?
A. We have one such arrangement that we have, and it's approximately -- it varies between two and three loads of milk a day.
Q. The new cheese plant in Menomonie, were any of the costs from that plant included in the information you described today?
A. Absolutely none.
Q. And your processed cheese plant -- I have to admit, I'm not extremely familiar with the process of making processed cheese. Is there any additional milk that gets delivered to that plant or is it just barrels and other ingredients?
A. Barrels and other ingredients. And obviously, none of those costs are included.
Q. Right.
Okay. On page 2 where you begin describing your barrel cheese costs, you note that you added "whole milk UF at the start of our process to increase the efficiency of each vat cycle."
So although this is pretty self-evident, that was an investment made after the last Make Allowance

adjustment, correct?
A. Correct.
Q. And if you could, explain for me how adding that UF process at the beginning increases your efficiencies?
A. So we have vats that hold 55,000 pounds of milk, or liquid, and by running the milk through a whole milk UF, the best way it was described to my board was it takes Holstein milk and turns it into Jersey milk. So we're able to run approximately 77,000 pounds of milk equivalent for every vat cycle. In addition, our plant was designed to handle 21 vats per day, and through efficient use and scheduling, we have been able to get 24 vats per day. So the UF and better management techniques, we have been able to increase our production.
Q. In addition to increasing the throughput, does that also help with your casein to fat ratio or anything like that related to how much yield you can produce?
A. No. Because if we run -- we don't separate anything prior to making cheese, so all we're doing is moving the -- removing the lactose to allow more efficient use of each cycle.
Q. What kind of vats do you use when you produce your barrel cheese? Are they open vats or verticals or horizontals?
A. Horizontals.
Q. Okay. I asked this of Agri-Mark's witnesses, and I would like to ask the same of you.
Do you think that Ellsworth's costs of production

for barrel cheese are above or below the average for all barrel producers?

A. I will say we are -- we -- I can answer it this way. Our costs of production, up until 2022, was below the Make Allowance, for both cheese and whey. I don't know what other costs are for other manufacturers.

Q. Okay. I have what I think is I guess a philosophical question for you that came to mind while you were answering some others.

If USDA elects to exclude barrel prices from formulas, should USDA consider the cost data from barrel manufacturers in setting the Make Allowance?

A. No, they shouldn't.

Q. Okay.

A. That was an easy philosophical question.

Q. I thought I knew what your answer might be, but it was worth asking.

MR. MILTNER: I -- I don't think I have anything else. Thank you.

THE COURT: Other cross other than AMS for this witness.

Seeing none, AMS.

CROSS-EXAMINATION

BY MS. TAYLOR:

Q. Good afternoon.

A. Good afternoon.

Q. Welcome back. Let's see here.

This first one is another easy question as well.

I think I know the answer. But just to be clear, when you are comparing the costs here between 2006 and 2022, that's your actual 2006 cost, that is not the survey from 2006?
A. It is actual cost.
Q. And you talk -- I mean, you give us all the barrel cheese costs that you have experienced, and later on you list packaging differences between barrel and blocks.
But would you say that the other costs for block cheese are similar to your barrel costs?
A. There is a couple that are very similar. Labor in one seems to be very -- between our two plants, I'm going to say no. But when I look at our survey work between what was provided, labor seems to be very consistent between the two.
The problem that -- voluntary survey work and how it's compiled is no one knows what they are including for the right numbers and how they are including that. So it becomes very difficult to say, this is the right number. It's the number that was given to Dr. Stephenson, and that's what he's working with. So it's hard to -- it's hard to say.
So when I use packaging cost, as an example, that's one item I can clearly break out to say, this is not right, because I know what it costs. And I may not buy cardboard specifically at the best, but it is not going to be off by 100%.
So that's just where I can see differences in the survey on how the information was reported.

Q. Okay. Thank you. I appreciate that clarification.
So for your cheese costs, I guess the first question, you have the last grouping for cheese is other, and you say that is a catch-all.
Can you give a few examples of what catch-all costs would be in that category?
A. They actually got smaller over time because -- oh, in 2006, I was not there yet, and when I started in 2008, we started to actually do cost studies, and we started to break them out. So as I mentioned the rennets and the plastic, we started tracking those specifically. So it's generally going to be like the catch-all, USDA inspections, Wisconsin inspections. Those kind of things would be in the other. And generally, when they are spread out over a larger cost -- or a larger tonnage, they don't have a lot of significant impact.
Q. Well, that was kind of my second question. So you talk about how utility costs went up 37%, but yet you saw a decrease --
A. More throughput.
Q. -- and the same thing for other, went up 10%, and yet you saw a decrease of $0.014. So I wonder if you could explain for the record why.
A. Because we're spreading out the same cost over a larger amount of product, whether it's cheese or whey. So one of the ways to get more efficient, whether it's milking cows or running a cheese plant, is to get more out

of the same fixed asset.
Q. And part of that was -- driving that maybe was your -- well, increasing your production was -- your efficiency was the UF part that you installed?
A. UF and adding more vats. But predominantly, the UF.
Q. Okay. So I -- well, not just me -- we added all the costs that you list for the cheese side of the house. We came up with a slightly different number of .065, but in your testimony you have .064. And I'm wondering if that just might be a rounding issue somewhere.
A. I believe it is. I used a spreadsheet, and they round those numbers.
Q. Okay. The next one's a little more detailed.
So on page 4, we're on your whey side, talking about supplies. So if we looked at this right -- and I'm going to look at the last sentence before the Table 1. Supply costs for this period went up .005. The change in packaging material was also up .004. And the change in the makeup of the product shipped was down .0029. When we add those numbers up, we don't come to .0011.
A. And it is really hard to get there because you have to have the other root numbers, which I did not include, because it -- it just varies on the product mix and the packaging type. So if you just look at the cost of raw materials, i.e., a bag to put whey in, or a tote, those are one set of costs that went up. And because we changed the mix and spread it out over a different

quantity, it gets convoluted.
At the end of the day, if I were to report, as we did, to Dr. Stephenson's report, we would have reported at basically a negative 1.001 cost difference for packaged product.
Q. Okay. So what gets us confused then, if we add up those numbers, we get to .0491, but on page 5, you get to a total cost of .054. However, if I use the .0061 number that we had computed, we actually do get to the $0.54.
A. That's correct. Good math. I love that.
Q. So we're just trying to make sure we understand the numbers, you know, as they are presented.
A. And I'm trying to add some context --
Q. Uh-huh.
A. -- that dairy plants are not static. The dairy industry is not static. We change, we adjust to what market condition is out there, even on commodity products like sweet whey. And -- but at the end of the day, our costs still went up, that $0.0054 cents per pound to process it, even though there are other changes within it.
Q. Okay. On the packaging costs for -- you list in Table 2 and Table 3, what years are those for? Do you remember? I don't think it's marked on the table.
A. They would have been for, I believe, March or April of this year.
I will state for the record, we have -- our packaging costs are based on corrugated cardboard fiber. I think there's actually a futures market for that. And

that's actually gone down. So we have seen some costs go down from the high point, and cardboard is one of that. Some of the plastic products have gone down from the high of 2022.

Q. Okay. You touched a little bit on your utility costs and how you purchase natural gas and electricity.

A. Correct.

Q. And that helps keep those prices more stable for you.

Can you talk about whether this is a common strategy used amongst plants that you are aware of?

A. I am not sure how common it is. One of the benefits that we have is that we run our plant consistently, and that is one of the keys in order to get those -- that pricing lower. We really don't have any downtime. Everything is always running.

Our -- for electrical rates they charge you a peak loading rate and a base loading rate. We don't have any difference. It's the same -- practically the same numbers. So all our equipment is on all the time, so they give us a pretty low rate for that.

On gas, for example, there is a little bit of variation, but you have to have standard purchasing throughout the month, and we're pretty consistent on that, too. So we just have been steady Eddie on what our gas and electrical consumption has been.

MS. TAYLOR: I think that's it from AMS.

THE COURT: Anything else?

Mr. Miltner.

CROSS-EXAMINATION

BY MR. MILTNER:

Q. I neglected to ask one question of you.

The UF facility or the UF equipment that you installed, obviously, it increased your costs, correct, to install that, right?

A. Correct.

Q. And you have incorporated those costs into the data you have presented here today, correct?

A. Correct.

Q. And you're asking for USDA to recognize the steps you have taken or that Ellsworth has taken to become more efficient, correct?

A. Correct.

Q. But there's a cost that comes with that, and you're asking that the formulas reflect both the investment and the efficiencies received, correct?

A. The answer is correct, just as they always have to use depreciation or return on investment within the calculation.

MR. MILTNER: Thank you. That's all.

THE COURT: Dr. Bozic.

DR. BOZIC: Your Honor, I apologize for not being available for cross earlier. Unfortunately the world doesn't stop just because we are here. I had a call I had to take.

THE COURT: Anyone objecting to this as --

Hearing none, you may continue.
DR. BOZIC: Thank you. Thank you, your Honor.
CROSS-EXAMINATION
BY DR. BOZIC:
Q. Mr. Bauer, as an iPhone owner, I got really concerned by your testimony.
You don't have information about child labor in iPhones, do you?
A. All I read about is in the news about child labor being in this product or that, and boycotting, and it's like, okay, so...
Q. Well, I would never use a product that has child labor, and also, like yourself, I would never propose a proposal for which I would have any degree of confidence that would hurt dairy farmers. We might not agree on the -- how to solve the barrel problems, but I do want you to know I appreciate the passion with which you represent your members.
A. Thank you.
Q. I wanted to visit a little bit on your experience with cost accounting, and you recently went to a process of expansions and new facility buildings.
Have you explored how much savings there are in these really large cheese plants that have been popping up around the country last six, seven years, on a per pound of cheese? How much do they save versus, let's say, a plant of your size?
A. I am not privy to their information, but that's

not to say that I can't speculate based on the stated numbers that they are throwing around to build these plants. It's pretty substantial investment for these plants to go up. And it becomes a pretty hefty amount, and I'm going to say dollars per hundredweight that somebody has to fund these new plants, well beyond the current Make Allowance.
Q. So you would suggest that the Make Allowance that would satisfy the cost structure of new plants is even in excess of Make Allowance that would cover your costs?
A. If I understand the question correctly, the -- a new plant, Make Allowance would be in excess of what is being proposed for the Make Allowance? If I understand the -- that's what the question was, then the answer is yes.
Q. The answer is yes. Okay. Okay. Then I won't go down that path more.
The other question I had is regarding the risk management for barrel manufacturers. What -- I understand that you disagree with the Edge's natural outgrowth proposal for barrels.
Would you agree that if AMS does implement that proposal, that barrel sellers as well as barrel buyers would have an easier time managing risk than it is the case today?
A. If -- can you -- can you state that again, please?
Q. So let's say that the AMS comes up with a proposal where the barrel weight ends up being exactly, let's say,

25%, and everybody knows in advance that for the next 12 months it's going to be 25%.

Would it follow that by using the combination of all cheese futures and block cheese futures, yourself as a barrel seller, as well as your clients who are buying barrel cheese from you, that both of you would have an easier time understanding what the projected price for barrels is and potentially even lock that price in?

A. The assumption is, is that you can actually use the futures market and have liquidity to do that, and it does not have that. We have been trying to use the futures market to limit our hedge -- or limit our exposure, but at some points we end up being 25 to 50% of the open interest in the market. There is not enough liquidity in the market to support that assumption.

Q. CME has traditionally pursued very tight specs for their contracts in order to encourage more liquidity and reduce basis. For example, if you look at the corn contract, it is #2 yellow, 5,000 bushels, these particular months of the year, etcetera, etcetera.

If the uncertainty is removed regarding the weight that blocks versus barrels would have in that relationship, wouldn't that be a step towards resolving the liquidity issue?

A. You are assuming, because I believe the CME can't agree on a new spec for barrels, that there would be such a contract or item to go forward. So I don't believe that the future -- the history has not supported that

conclusion.
Q. To be clear, Edge's proposal does not require any action from CME. Because the weights for blocks and barrels would be fixed, one could use the all-cheese futures and the block cheese futures to figure out what the implied barrel futures would be, and they would be --
A. It still does not help the producers at all. It -- it limits their producers. I know Dr. Vitaliano has done a chart based on the 35%, and it does improve the percentage that the producer -- the American dairy farmer would get. But it is not -- it pales in comparison to eliminating it entirely.
So, again, I go back to the analogy, that it -- if you are going to have barrels subsidized exactly, the rest of the -- 90% of the industry, what's the difference if you are using child labor law to build your iPhone or your Nike tennis shoes or whatever? It is still in that product.
Q. Yeah.
A. I don't know if you are wearing Nikes or not.
And I use those two because people pick on them because they are big brands. I mean, that's really what they are, so --
Q. No, I understand. But, of course, your assumption there is that the unfavorable price relationship between barrels and blocks would continue going forward, as it was last the few years?
A. And even if it -- if we change to price off of

blocks, we'll have continued transparency in the industry. We won't have 90% priced off of blocks, we'll have 100% priced off of blocks, and then we have a much clearer basis and transparency in using the futures market to -- to have our customers and our farmers have clear and transparent prices in the future. No need to do the math. We all price off the same unit, just like the other three commodities, other three commodities are used to price different component values.

Q. Mr. Bauer, if you offer barrels off blocks, and your competitor comes in, and they are willing to price barrels differently, and they come in $0.15 below you, how much -- how confident are you that your potential client will not switch vendors and go from you to your competitor?

A. It's very difficult to switch formulas within a manufacturer setting. And the -- most of the barrels in the Upper Midwest are already presold, so these discussions need to be had with the customers years in advance.

And, in fact, we're trying to get our customers to look at how they can hedge their product and their raw material for their end customer, and when you talk to them, it's like, hey, look, all you got to do is use the block market, and this basis over -- they are like, oh, it's that easy?

We have such a complicated formula because that's what we invented. We can change it. USDA can change it and make it more transparent and a more profitable dairy industry by getting rid of the barrels in the calculation and Class III component -- Class III protein pricing.

Q. Mr. Bauer, if an exporter can choose to produce either I'd say frozen mozzarella for exports or either blocks or barrels for domestic market, and they switch based on their export competitiveness, and if you essentially eliminate the price discovery for barrels markets, would you expect them to start making blocks when they have struggles in exporting mozz overseas?

A. I think they will make the best decision that they can at the time.

Q. If that best decision turns out to be blocks, what would that do to the price of blocks?

A. Well, then there would obviously be more cheese in the market and then lower the market. But it would lower it at an equal value, like it would for all the other products versus a mythical 52% or 48% depending on the time of the year. It would be an actual market. No different than for whey or butter or nonfat dry milk. We'd have parity with the other products, finally.

Q. Mr. Bauer, thank you for your answer.

I believe Mr. Brown testified that barrels can be stored for a period of up to six months at a certain temperature without affecting their functionality.

Is that your understanding as well?

A. And I understand blocks can be stored for ten years. So cheese can be stored for extended periods of

time. It's another way to arbitrage your product and pricing for manufacturing of processed cheese or other products. No different than butter or dried sweet whey, they all have long-term storage capabilities to it.
Q. Would you have to use different starter cultures if you are going to make blocks that would need to be stored for that period of time?
A. It depends on how you want to store your product and how you want it to function in the end.
Q. If you wanted that block to function as a fresh cheese, in the end, would you be able to do that?
A. Well, it would -- the same -- same concept if you wanted your barrel cheese to function as fresh cheese. It is not going to. You have to understand how your product and how your end consumption is going to be on that product.
Q. So your claim is that barrels and blocks are -- that one form of cheddar over the other has no advantage in storage without change of functionality?
In other words, if you don't want your cheese to age, you just want to freeze it and bring it back six months later, you're saying there's no advantage if you make barrels versus blocks?
A. There's all kinds of different things cheese manufacturers can do to limit the aging profile on cheese, and temperature or freezing is certainly one of them.
Q. And that can be equally successfully applied to blocks and barrels?

A. It depends on what the outcome is and how they want to handle it.
Q. But --
A. If you are using processed cheese, at the end of the day, you still have to have a firm body in order for that cheese to function, which requires cheese less than 30 days old. Even if you freeze it or bring it back, there are some slight differences.
And remember, processed cheese is all about consistency. And we have very skilled people that can take less than originally spec cheese and turn it into a great product in the end for our consumers in foodservice.
Q. Thank you for your answer.
The capacity increases in barrel manufacturing in the period 2016 to 2019 or so has been quite substantial; would you agree with that, capacity increase in barrel manufacturing?
A. It may. I'm not exactly certain of that, because I have seen other barrel manufacturers go out of business in that same timeframe.
I think what has changed is people are out of the Federal Order system, using different methods to price their raw material and using the CME as a way to market product versus selling the product ahead of time.
What's interesting is that USDA has a great stat. It's the NASS data quick stats, and you can look up processed cheese in there. And it is grown substantially in the last two years to 2.8 billion pounds from a pretty

steady 2.3 billion pounds. So the industry's dynamic, and it is changing.

And I don't necessarily believe that added capacity from out west -- because I do know of at least two plants that have gone out of barrel production, and some have added additional capacity. But there's also been additional need within the industry, too, for processed cheese.

Q. If over the next 24 months we have substantially new block making capacity but no new barrel making capacity, and if AMS does not heed your advice and eliminate barrels, would you anticipate that the block-barrel spread might get inverted in 2025?

A. It could or could not. It all depends primarily on where the processed cheese is going to be used and processed, because processed cheese can still use 640s or 40s depending on the price. But what will happen is if more cheese manufacturing comes online, there could potentially be a shift in how the industry has either more or less product available, which will increase or decrease supply and demand. So just fundamental economics.

Q. Would you agree that if block-barrel cheese -- excuse me -- block-barrel spread gets inverted in 2025, that that may hurt farmers if your proposal is adopted?

A. If it's inverted, there -- as it did the prior year in 2022, for only half the year, and it then self-corrected. The problem is, is we had a great first half of the year and a bad second half of the year. By pricing off of one consistent product, we can use the futures market to protect our margins, both on the plant level, on a processing level, and on a farm level, and we can't do it under today's environment when blocks are included in the calculation of Class III protein.

Q. Does your answer depend on the assumption that your clients would agree to forward basis?

A. Even if they use the government programs that are available today, they still have a hard time securing their basis because we are so heavily involved in blocks -- excuse me -- in barrels, that it's hard to determine what their basis is going to be. So they have a hard time, they have a basis risk greater than most.

Q. What I was asking is for a barrel buyer to agree to, you know, buy off -- price their purchases off blocks, for you to be isolated from the oversupply of barrels, you would also have to have a contract where it says something like, you will pay me, let's say, $0.03 below blocks for any barrels shipped to you over the next 12 months, that that basis would also have to be fixed; is that correct?

A. When we compare block manufacturers to barrel manufacturers and how it's priced, there will have to be a readjustment in the marketplace.

What I find interesting about this -- and I know you had a presentation at the cheese con earlier this year, and I know Mike Brown had a presentation at cheese con -- and what was so striking in that presentation is how barrel manufacturers, in essence, were subsidizing block manufacturers because of the Make Allowance. So that is what the reality has been happening, the barrel manufacturers have been screaming, National Milk, and we have been waiting for a holistic approach that's -- I'm going to come back to the whole proposal of National Milk -- make a holistic approach. And we can support that, because we don't get quite everything that we want, and neither does anyone else.

At the end of the day, the dairy farmer has to support this. And that's why we have the Make Allowances set where they are. Removing the barrels is part of that. Changing the Class I movers, the higher-of, all the proposals within National Milk make a comprehensive package that every dairy farmer can get behind and hopefully passes once USDA gets the recommendation out.

Q. I appreciate your answer. Just to make sure that I got the answer to my previous question, for you to have stability regarding the barrels yourself, is it true that your clients would have to agree to pay a price that's based on block plus a basis that is fixed for an extended period of time?

A. They would have to -- which is what they do today, only on the barrel market. So we would have to rotate to a different market. It would be a very simple, negotiated, third-party transaction calculation.

Q. But in other words, if they don't agree to a fixed basis, we can still price it off blocks. We would still be exposed to the availability of surplus barrels?

A. If -- if in the worst case scenario, if the industry does not move, dairy farmers will still be better off because we'll have more value in Class I that we can potentially bring back to our farmers.
The worst case scenario is we still get better in the dairy industry. So that's why it's -- I'm so passionate about it because there is -- the downside is to keep what we have, institutionalizes that barrel manufacturers get penalized and block manufacturers get rewarded. And that's what -- it is not orderly marketing in the industry.
Q. Mr. Bauer, I don't question your passion, just economics.
So, again, the assumption that you would be better off assumes that any surplus milk that cannot be converted to mozz that's exported, would not find itself way back to the block market that would then depress the block prices the same way that it's currently depressing the barrel market.
A. Well, under the same scenario, if all the barrel manufacturers go out, then we're in the same boat, are we not?
Q. I'm not concerned about all barrel manufacturers going out of business. I'm just --
A. So if we have one barrel manufacturer setting the price for 50% of the milk, that's acceptable? I don't think we have the economics of what's -- the economics will come to bear on whatever they are. I understand -- I

fully recognize and understand that what is happening today in the barrel market is not sustainable. To have one out of six years where we get back to normal is not sustainable. Our creamery already is at a disadvantage of about $33 million. We can't keep doing that. We'll either stop making barrels or make a different product. And that's one less barrel manufacturer, and that's just going to go to the next one and the next one, until pretty soon we don't have any barrel manufacturers, except for the largest ones out west. And they are not part of the Federal Order system, they are just part of the price calculation.

Q. And, again, I appreciate your passion to remain in the barrel business. I do want to be on the record that your proposal will take you out of the barrel business because you will be out completely by those --

A. I'm still competing with them to this day. And I will next year, absent -- but I don't have the opportunity to work within the system to change it because it's institutionalized that, oh, well, that's part of the milk calculation. If it's not part of the milk calculation, I have that ability to talk to my customers and do something different.

Q. I appreciate your answers. And, again, I do want to emphasize, again, because these exchanges can get quite intense, but, you know, everybody in the organization that I represent wishes nothing but the best for all Upper Midwest manufacturers, Ellsworth included.

DR. BOZIC: Thank you, your Honor.
THE COURT: Okay. That was some late cross. I forget where we are. AMS has gone. We have redirect. AMS is finished, right?
MS. TAYLOR: Done.
THE COURT: After all that, no further questions.
MS. HANCOCK: I wasn't sure if it restarted everything, so --
THE COURT: Well, me either. I would rather declare an end to this and move into -- unless you have got something further after --
MS. HANCOCK: I just have a couple of questions.
THE COURT: All right.

REDIRECT EXAMINATION

BY MS. HANCOCK:
Q. And, frankly, some of this might have been cleared up already, but I just want to make sure that I have this.
You had some questions earlier that was talking about essentially what I would characterize as the innovations of your products and how they have changed over time and whether you are really comparing current data apples to apples with your historic data.
Do you recall that?
A. I do.
Q. Is it fair to say that over time you have evolved your product mixes and the techniques that you have used to manufacture your products as ways to build in efficiencies to say profitable?

A. That is true.
Q. And -- and we can see that when we look at your Table 1, when we look at your packaging style of whey in comparing 2006 to 2022?
A. Correct.
Q. And -- okay.
MS. HANCOCK: That's all I have on that, your Honor. We would move to admit Exhibit 171.
THE COURT: Any objections?
Seeing none, Exhibit 171 is entered into the record.
(Thereafter, Exhibit Number 171 was received into evidence.)
THE COURT: Thank you.
Yeah, we have been going for only an hour, but we only have an hour left, so take a break? The court reporter says she doesn't need a break.
(Off-the-record.)
MS. HANCOCK: It is a very delicate balance to hit the mark on the schedule.
THE COURT: I understand.
MS. HANCOCK: So at this time we're going to call Travis Campsey.
THE COURT: Raise your right hand.
TRAVIS CAMPSEY,
Being first duly sworn, was examined and testified as follows:
THE COURT: Your witness.

DIRECT EXAMINATION

BY MS. HANCOCK:

Q. Good afternoon, Mr. Campsey. Would you state and spell your name for the record, please?

A. It's Travis Campsey, C-A-M-P-S-E-Y.

Q. And what is your business address?

A. 813 8th Street, Suite 300, Wichita Falls, Texas, 76301.

Q. Thank you.

And have you prepared testimony identified as Exhibit LSMP-1?

A. Yes.

MS. HANCOCK: And, your Honor, I believe we're at Exhibit 172 for identification.

THE COURT: We are. So marked.

(Thereafter, Exhibit Number 172 was marked for identification.)

MS. HANCOCK: Thank you.

BY MS. HANCOCK:

Q. Mr. Campsey, would you provide us with your testimony?

A. Yes, I will.

So there's a little bit of the intro in the written document. I guess I will go ahead and introduce myself. My name is Travis Campsey. I work for Lone Star Milk Producers. I have been there for the last 21 years. Graduate of Midwestern State.

Q. I think your microphone is off just a smidge.

A. Is this better? Good.

My name is Travis Campsey. I'm the CFO for Lone Star Milk Producers. I have been with the company for the last 21 years. I'm a graduate of Midwestern State University in Wichita Falls, Texas, with a Bachelor's in accounting and a Master's in business administration. I'm a Texas CPA and a CMA as well. I have been an active member in the National Society of Accountants for cooperatives for the last 20 years as well.

Over the years, I have served in various roles for the co-op. Some of those titles have included secretary, treasurer, and vice president of manufacturing. I have been a board manager of Lone Star Milk Producers' subsidiaries, as well. A lot of the time has been spent on finance and accounting for the cooperative and its subsidiaries.

Over the time I have spent about ten years working with the Oklahoma City plant which has produced powder, cream, and condensed milk. A lot of that work was accounting and finance, and I learned something about operations of the powder plant in that time. And then for several years I headed up the marketing for cream and condensed and nonfat dry milk sales.

I have been involved in the Lone Star dairy products plant in Canyon, Texas, from conception through now. And I served as the on-site CFO for about 15 months, ending in December of 2022.

So in the written testimony, I'll start in the --

just at the end of the first paragraph here, I guess.

So, Lone Star Milk Producers, Inc., is a Capper-Volstead cooperative association, is qualified to market milk on Federal Milk Marketing Orders, is a member of National Milk Producers Federation, and fully supports Proposal Number 7.

Lone Star regularly markets its members' milk on the Appalachian, Southwest, Southeast, and Central Federal Milk Marketing Orders.

My testimony will focus on the need for an update and improvement in the Federal Order Make Allowances, the adjustment to the wholesale dairy product prices, that along with yield factors allow the conversion of the wholesale dairy product prices to the Order Class and Component prices.

Lone Star supports National Milk's Proposal Number 7, as listed on the Notice of Hearing. We offer today relevant data on changes in costs of milk processing that we, as the operator of a cream, butter, and nonfat dry milk processing plant, have experienced over the last five years.

Lone Star's butter and nonfat dry milk plant is located in Canyon, Texas, which is approximately 20 miles south of Amarillo, and is a relatively new plant, opened in 2017, which was subsequent to the most recent update in Federal Order Make Allowances.

The plant's official name is Lone Star Dairy Products LLC. I might refer to it as LSDP.

The LSDP plant qualifies as a pool supply plant on Order 126. And as I stated a moment ago, I worked out there from September of 2021 to December of 2022, and I have been on their board since inception.

Regular monitoring of the financial results of the plant is an area I have been tasked with since the beginning of the business.

So, seemingly, almost all newly constructed milk plants experience operational challenges when they first open. Lone Star Dairy Products is no exception. Consequently, we determined that cost data from 2017, the year LSDP came online, would not be indicative of the costs of operating the plant on an ongoing and regularly operating basis.

The data presented in LSMP-2, which is a one-page exhibits that we'll get to in a moment, compares certain costs experienced for the operation of the plant, just in a small sample, during the months of January through May of 2023 and the same, so January through May of 2018.

The several cost items compared are hourly labor rates, utilities costs, and property insurance. We have expressed these time-period comparisons as a percentage change since the underlying dollar cost or per unit cost would reveal competitively sensitive proprietary information.

The data presented in Exhibit LSMP-2 are summarized from the books and records of LSDP, and are reasonable and correct to the best of our knowledge and belief.

In no surprise, costs of operating our plant have risen considerably in the five years since early 2018. For labor costs, hourly wages, depending on the operations department, increased between 27 and 49%, which was an average increase across the various operations departments of approximately 35%.

This is only the gross wage number. It does not include payroll taxes, fringe benefits, health insurance, work comp insurance. It doesn't include any of those things. Just the pure base gross wage number.

Utilities costs at LSDP overall are virtually unchanged across the five years, but only because we invested millions of dollars during this period to upgrade and significantly increase the throughput of our wastewater treatment facility.

The wastewater treatment expansion increased our ability to process wastewater five-fold from when the plant was built. This substantial capital expense has had the effect of actually reducing our ongoing monthly water and sewer charges.

Unfortunately, we have no such mitigation potential when it comes to the use of electricity and natural gas, and their costs both increased roughly 25% over the five-year period.

It is interesting to note for natural gas, in the recent past, there have been five-month averages where the rates were more than double those of the five-month average of January through May 2023.

So it's -- as a footnote, I think in 2022, there's probably about a 400% difference between the low and the high on the rate on natural gas out where we are. So pretty volatile stuff.

The recent real shocker in plant costs is property insurance, which increased nearly 378% in one year, most of which occurred in March of 2023. Insurance companies' recent loss experience due to multiple milk dryer fires, hurricanes, winter storms, and other large-scale disasters across the U.S. have resulted in the massive increase in property insurance costs. We diligently shopped for insurance at the most recent renewal, and this was the best we could do. These insurance cost increases are frightening, and we doubt we will see much moderation any time soon.

The dryer fire losses experienced at other plants, which caused our insurance rates to increase, also forcefully reminds us that we are dealing with mechanical devices, and there is always the risk of something very bad happening, and that risk must be mitigated by proper maintenance and ongoing safety protocols, neither of which are cheap if done right.

Fortunately, the more modern milk-drying equipment is equipped with many redundant safety features to lower the risk of catastrophic failures, and LSDP is so equipped. This is important for reduction of risk, but does make the cost of purchasing and operating the equipment higher than in the past.

Lone Star, through its milk products manufacturing plant, experiences on a daily basis what it costs to operate a hard product manufacturing facility, and as such we see how inadequate the current Federal Order Make Allowance values really are, because our operation costs at LSDP exceed the current Federal Order Make Allowances.

However, although we suspect our experience of increasing costs is much like that of other processors, we also suspect that the way we capture the cost data likely is not exactly comparable to the way other processors complete these analyses.

A standard set of cost reporting and cost evaluation criteria are needed to make sure industry-wide costs are gathered and compared apples to apples, and thus provide consistent data for the industry and the Secretary to evaluate when establishing Federal Order Make Allowances.

Plainly, we are not there today. Voluntary surveys, combined with potentially imprecise methods of reporting and collecting cost data brings into question the cost data's usefulness in developing Make Allowances. A better mouse trap is needed, and it needs to be an obligatory one.

In other businesses, for example Medicaid and Medicare, cost determination methods are rigid, standardized, reporting is required, and the individuals who create and file those reports are required to be trained and certified before they are qualified to submit such reports. Not that those models necessarily represent the best of the best, but the concept of using a standard method that is consistent across the industry seems a reasonable prerequisite to having valid, comparable cost data.

We at Lone Star support National Milk's proposal to make modest increases in the Make Allowances as proposed. This first step as proposed by National Milk Producers Federation almost assuredly does not capture the entirety of the raw milk conversion cost increases experienced by dairy product manufacturers, since the last time these rates were set in 2008, but it moves us in the proper direction.

This cautious step recognizes both the need to make an adjustment in Make Allowances, but is reserved enough in its magnitude as to not jeopardize the confidence the industry has in Federal Order pricing. Additionally, this measured proposed increase in Make Allowances recognizes, and accounts for, the needs of dairy farmers to not see excessively large downward changes in the Orders' Class prices, since such large changes can themselves create market disorder.

Lone Star fully supports the Make Allowance increase provided in Proposal Number 7 as a prelude to consistent, auditable, mandatory processing cost reporting which will bring confidence in the process, and support

the orderly marketing and pricing of milk.
        This concludes our prepared testimony. I'd like to thank the Department and others for allowing us to appear here.
    Q.   Thank you, Mr. Campsey.
        And then the final page of the exhibit is actually a separate marked exhibit LSMP-2 that you referenced in your testimony.
        MS. HANCOCK: Your Honor, if we could mark that as Exhibit 173?
        THE COURT: Yes. So marked.
        (Thereafter, Exhibit Number 173 was marked
        for identification.)
        MS. HANCOCK: Thank you.
BY MS. HANCOCK:
    Q.   Mr. Campsey, you also -- when you reference that LSMP-2 in your testimony that we have now marked as Exhibit 173 -- and the title on this is just comparing January through May of 2023 with January through May of 2018.
        Is it just those two time periods that you provided a snapshot comparison of it?
    A.   Yes.
    Q.   Okay. And is it fair to say that there's been some variability in between there, but this is the net effect of what those numbers are?
    A.   Correct. Yes. Particularly on the utilities.
    Q.   Okay. And does this take into account the

additional expenses that were incurred in building, constructing, and opening the plant in Canyon, Texas?
A. These costs are not -- I guess I don't know how location specific they are or costs of the total build. These are -- these are normal operating type costs.
Q. Okay. And would those normal operating costs have already been incurred by 2018 if it opened in 2017?
A. Right. Things had leveled out, if that's what you are getting at.
Q. Yeah.
A. From total startup mode.
Q. And my point is, just those two snapshot periods would have already taken into account that new plant operation?
A. Uh-huh. Correct.
Q. Is that a "yes" --
A. I think so, yes.
Q. -- just so the record is clear?
A. I -- I believe so.
Q. And that would also take into account any efficiencies gained by having the new plant design and implement operations?
A. In theory, yes. We still work every day to become more efficient.
Q. And that's fair. That's just always an ongoing task that you have to undertake in order to build in the best and most efficient processes to capture the most efficient way to operate your plant?

A. Correct.
Q. And do you know how the Exhibit 173 cost compared to 2006?
A. I don't have a good comparison since this plant's only existed since 2017 is when it started.
Q. Okay. And did you have a different plant where you were producing under previously that had been closed down?
A. We did.
Q. And do you know how the -- this plant compares to your prior plant in the cost of operation?
A. I haven't studied that for today. The other plant was about a 1965 model. So I'm not sure those are apples and apples.
Q. Okay. Fair to say the 1965 model was much more -- or much less efficient?
A. Could be.
Q. Okay. And then does Lone Star engage in any kind of risk management practices?
A. Not particularly at this point.
Q. Okay. Can you talk about -- about that and how you have reached that point?
A. So the tools are complex on the risk management side of things. If you are talking about like a farm's ability to hedge its own Class III prices or Class IV prices and so on, we leave that up to our farmer members and suggest that they get the help of a broker that's familiar with the subject matter, so that they can design

their own program, they can catch their feed, and their milk cost, and all that kind of stuff together.

Q. And do you know what percentage of your membership uses or utilizes the risk management tools?

A. No, I don't know.

Q. Okay. And do you assist them with that, though?

A. No. No.

Q. Okay.

MS. HANCOCK: Thank you, your Honor. At this time we would make him available for cross-examination.

THE COURT: Who has questions for this witness, other than AMS?

CROSS-EXAMINATION

BY MR. MILTNER:

Q. Good afternoon, Mr. Campsey.

A. Good afternoon.

Q. Ryan Miltner representing Select Milk Producers.

My first question actually doesn't have to do with your statement. In the last hearing on manufacturing formulas, Lone Star supported certain proposals that were led by dairy producers of New Mexico which were very similar to Proposals 10, 11, and 12 in this hearing that Select has introduced.

Does Lone Star have a position on those proposals?

A. I would say that another witness would probably be in a better position to answer that question.

Q. Okay. For your plant in Canyon, what products are produced there?

A. We make a variety of products out there. Just running down the list, on the fat side, there's cream and butter. On the skim side, there might be condensed skim milk, skim milk powder, nonfat dry milk powder.
Q. Do you make any whole milk powder?
A. No.
Q. Have you ever?
A. No.
Q. Do you make any buttermilk powder?
A. Not -- not by itself. No.
Q. Okay. On the website for the plant those products are both listed. So the website would be incorrect?
A. I think the equipment is designed to be able to handle those products, but we don't have the volume to make them on a regular basis or to get into that.
Q. Got it. Okay.
For the butter that's manufactured, is that bulk butter?
A. Yes.
Q. Okay. Do you make any butter that would be packaged for consumer use, like in quarter-pound sticks or --
A. No. It is all 25KG boxes.
Q. Does the plant report sales of its nonfat dry milk to the NDPSR?
A. It does not.
Q. Is that because of the volume or because of the specifications?

A. It's based on the rules of what's reportable and what's not.
Q. Okay. Does it report its butter sales to the NDPSR?
A. No, we don't.
Q. Did Lone Star provide information on production costs for Dr. Stephenson's most recent update to his cost analysis in 2022?
A. I don't believe so.
Q. Did Lone Star provide cost data to the National Milk working group for their preparation of Proposal 7?
A. I don't believe so.
Q. Do you know if Lone Star was asked to provide that information for either of those studies?
A. If it was, it didn't make it to my desk.
Q. Okay. On page 3 you talk about natural gas charges that the plant experienced.
The plant is located in Texas, right?
A. That's correct.
Q. And Texas experienced some very unique situations with natural gas availability and costs two winters ago, didn't they?
A. Yes. Yes, the winter storm was --
Q. Where --
A. -- an adventure.
Q. And during that winter storm, natural gas prices went up a thousand percent; is that right?
A. I'd have to look back at our data to see what

happens with ours.
Q. That would be a reasonable number, though?
A. I don't think I would -- I'm not going to hazard a guess on that one.
Q. Fair enough.
Were you able to even obtain natural gas during that storm?
A. We were fortunate to stay upright and operating for the great majority of that storm.
Q. On page 4, you state that your operations costs at LSDP exceed the current Federal Order Make Allowances.
If National Milk's Proposal 7 were adopted, would your operations costs still exceed the Make Allowances?
A. I'd say that's likely. It depends a bit on the definition of the operating costs and how you might package that.
Q. Did -- did you or anybody that works with you determine the manufacturing costs for Lone Star's products on a product basis?
A. We have run calculations for that each month in order to prepare our financial statements.
Q. Okay. So for nonfat dry milk and bulk butter, if National Milk's Make Allowances were adopted, would Lone Star still have manufacturing costs higher than the Make Allowances?
A. I believe so, yes.
Q. Okay. I think you were in the room when Ms. de Ronde was testifying from Agri-Mark, correct?

A. Yes.
Q. Okay. So you also state that this: First step as proposed by NMPF almost assuredly does not capture the entirety of the raw milk conversion cost increases experienced by dairy product manufacturers."
Are you speaking to all four of the surveyed commodities or only those that Lone Star produces?
A. I expect they are all too low.
Q. You heard -- I'm sorry. Go ahead.
A. The ones I'm intimately familiar with are on the nonfat dry milk and the butter.
Q. I don't think I'm misstating this. If I do, I apologize. But I believe Ms. de Ronde suggested that if National Milk's Make Allowances were adopted that Agri-Mark's butter/powder plants would be either operating at costs below the Make Allowances or very close to them.
Do you recall that?
A. I think I recall that being said.
Q. Okay. So where you say that National Milk's proposal almost assuredly doesn't capture the entirety of the raw milk conversion cost increases, that's true for Lone Star, correct?
A. Correct.
Q. But it's not true for all butter/powder plants, would it be?
A. I don't know the particulars of all butter and powder plants.
MR. MILTNER: Okay. Thanks. I don't have

anything else.
THE COURT: Other cross aside from AMS?
Seeing none, AMS.

CROSS-EXAMINATION

BY MS. TAYLOR:
Q. Good afternoon.
A. Good afternoon.
Q. Thank you for coming to testify today.
Let's see. Your statement focuses on Lone Star's costs at your plant. But can you talk a little bit about how the fact that your manufacturing costs are more than what's covered in the Make Allowance currently and how that impacts your Lone Star producers?
A. I think we'll hear some testimony from others on sort of the ripple effect of the Make Allowances through the other parts of the Federal Order system and pricing. But as it relates to our plant, at Canyon, the benchmark -- it sets a benchmark price that's -- you have to compensate for that in other ways I guess is the way to put that.
Q. And other witnesses will -- from Lone Star will elaborate on those other ways?
A. I -- I'm not sure. If you are talking about the plant particularly, then we end up discounting milk frequently --
Q. Okay.
A. -- to go in there.
Q. Okay. And that shows up on your producer milk

checks somehow?
A. All of it works its way to a producer check.
Q. Okay. For your butter/powder plant, for costs that can't be directly allocated to a product, how do you allocate costs when you are looking at that?
A. It's kind of a -- I guess I would call it a -- each product gets a different weight depending on how much of the plant that we figure that it utilized to get made. For example, cream is relatively quickly in and out. It touches receiving twice through the separators, through the HTST and then back out. So it gets less of the overhead, I guess is the way to describe that. Powder runs the whole thing from -- from nose to tail, so it gets the most.
Q. Okay. Would you call it a little bit of an art form then as you figure out how to allocate those costs?
A. Let's say the term reasonable basis of allocation is a hurricane path. Right? There's a lot of room in there to be one way or the other.
Q. Yes, there's a lot of room to be reasonable sometimes. I can appreciate that.
On the last page of your statement you talk about the overall support of the Make Allowances offered by National Milk, even though, as you testified, those would still be less than what Lone Star experiences. But you say "is reserved enough in its magnitude so as not to jeopardize the confidence of the industry" -- "that the industry has in Federal Order pricing."

And I wondered if you could expand on that thought.

A. I would say the bigger the -- the bigger the step you take, as the first step or the next step, the more scrutiny that's going to come under when you go to talk to farmers and the more sort of a concrete background they are going to expect to have to back up the number. This step does not -- doesn't get us all the way there, I would say. But it gets us to the -- to a next place to gather that more -- you know, hand in hand is to gather the more information and try to get it consistent.

Q. So when you say they would expect a more concrete background, can I infer from that, you know, the higher the number, the more they are going to want to know that this number is right, that you can point to something to say, this is the number?

A. I would -- I would expect that, yes. They are going to want to see a higher confidence level in those that are giving them the number.

Q. And then in the next sentence you say, dairy farmers -- "accounts for the needs of dairy farmers not to see excessively large downward changes in the order class prices, since such large changes can themselves create market disorder."

Can you talk a little bit about how they could create market disorder and kind of maybe what you would look at as considered a large change?

A. When you start moving things around north of a dollars a hundredweight on milk price, that's a pretty big -- pretty big shock to the system. The disorderly marketing could happen a couple of places. That could be at the farm level or that could be at the plant level. You -- you know, anyone who has been in a milk shed where a plant went out of business suddenly, that leaves a hole that leads you to do things with the milk that are not very economical until the system sort of levels itself back out.

At the farm level, if -- if they see a change, just a rapid change in the milk price and the way that works, that might affect their ability to hedge, change their basis, all those kind of things. So try to do that in moderation, I guess.

Q. Okay. Thank you.

On your comparison of processing costs, this is Exhibit 173. In these percent changes, are these on a per pound basis or just a total cost basis for the plant?

A. So the average hourly wages by department, that's on a per employee basis. So for every regular hour of work that we need to buy today, or at least in the early part of 2023, we pay 34% more for that hour of work for a dryer operator than what we did in 2018.

On the utilities costs, these are sort of an absolute cost. So just the total bill has gone up by 25% on the electricity, 24 on natural gas, and so forth.

Q. And obviously, then, same thing on insurance?

A. Yes.

Q. And for the two time periods you selected, were the plants running at a similar capacity, or was maybe in '18, not as much?
A. I don't recall checking the pounds through there, but gut feel says that '23, we have run more efficiently than we did in '18 -- or in terms of total pounds of milk through the plant is higher.
Q. Okay. Thank you.
MS. TAYLOR: That's it from AMS. Thank you.
THE WITNESS: Thank you.
THE COURT: Mr. Rosenbaum.

CROSS-EXAMINATION

BY MR. ROSENBAUM:
Q. Steve Rosenbaum for the International Dairy Foods Association. Just a follow-up on the last set of questions.
If the poundage had gone up somewhat by 2023, would that have caused the electricity to have gone up as well?
A. It might have, but it's not a direct relationship.
Q. What about natural gas?
A. Again, it may have. The rate on those varies kind of. So you could end up with a different result on more pounds or less pounds.
MR. ROSENBAUM: That's all I have. Thank you.
BY MR. ROSENBAUM:
Q. Just one more question.
You have the plant capacity, the loads -- 53 loads

of milk per day, 49,500 pounds in a load.
Is it a seven-day week, 365-day operation?
A. Right. The plant runs 24/7, 365, as long as they're not down for some reason.
Q. About a billion pounds of milk?
A. I'd have to run the math, but you are in the neighborhood, yes.
MR. ROSENBAUM: Thank you. That's all.
THE COURT: Okay. Redirect?
MS. HANCOCK: Your Honor, that's all the questions we have now. We would move to admit Exhibits 172 and 173.
THE COURT: Objections?
Seeing none, Exhibits 172 and 173 are admitted into the hearing record of this proceeding.
(Thereafter, Exhibit Numbers 172 and 173 were received into evidence.)
THE COURT: Thank you.
THE WITNESS: Thank you.
MS. HANCOCK: Your Honor, we don't have someone that we think is going to fit within the timeframe. We thought we would just move to talking about lineup for tomorrow, but we might need a minute to just double-check on our team first.
THE COURT: Yes. I think -- let's go off the record -- we don't need to be on the record to talk about tomorrow, do we?
MS. HANCOCK: I don't think so, no.
THE COURT: I mean, if appropriate, we can

summarize what we talked about off the record. Let's go off the record.

(Off-the-record.)

THE COURT: Back on the record.

MS. HANCOCK: Okay. So for witnesses tomorrow, we -- at most what we're going to have is Jeff Lyon, Karl Rauscher, Ed Gallagher, and then we have a dairy farmer Brittany Nickerson, and then we will move to IDFA/USDA on Stephenson. And we believe that that should take us all the way through tomorrow and partway into Wednesday.

THE COURT: Okay. Very well. I think with that, we can -- any other business we have to take up, either on or off the record?

Seeing none, we're adjourned for the day. See everyone tomorrow at 8:00.

(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: October 5, 2023
FRESNO, CALIFORNIA

MYRA A. PISH, RPR CSR
Certificate No. 11613

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