CERTIFIED TRANSCRIPT

NATIONAL FEDERAL MILK MARKETING ORDER

PRICING FORMULA HEARING

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

Before the Honorable Jill Clifton, Judge

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Carmel, Indiana

October 10, 2023

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Reported by:

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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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M A S T E R I N D E X

SESSIONS

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M A S T E R I N D E X

WITNESSES IN CHRONOLOGICAL ORDER

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M A S T E R I N D E X

INDEX OF EXHIBITS

IN CHRONOLOGICAL ORDER:

TUESDAY, OCTOBER 10, 2023 - - MORNING SESSION

THE COURT: Let's go back on record.

We're back on record at 8:06 in the morning on October 10, 2023. While off record we have discussed which exhibits might be dealt with now while this witness is on the stand but not yet finished, and I'd like to begin with what Ms. Hancock suggested while off record.

MS. HANCOCK: Your Honor, we would move the admission of Exhibits 310 through 319, with the understanding that Mr. Sims will be back to testify about his specific regional testimony that begins in Part 3 on Exhibit 310. But we have talked about all of the other exhibits at this point and would like to have those admitted.

THE COURT: Thank you.

Mr. Rosenbaum, I'd like you to explain your position on those things where Mr. Sims has not yet been cross-examined, please.

MR. ROSENBAUM: Yes, Your Honor. We have no objection to the admission of the exhibits that National Milk has used, subject to the caveat that National Milk has made the commitment that Mr. Sims will be back. And subject to, you know, that being the commitment, and therefore we have the ability to cross-examine him about the remaining sections of the exhibits, with that caveat, we have no objection to the admission of the exhibits.

MR. ENGLISH: Your Honor, we apparently do not have audio on the --

THE COURT: Oh, so people who are remote cannot hear what we're doing. Okay. I don't mean okay as in good. I mean I understand.

I think we'll keep going.

For those of you who are not in the room with us in Carmel, Indiana, we went on record a few minutes ago and did some things. I'll just recap that quickly so that you know what we have been up to while you could not hear.

Mr. Rosenbaum.

MR. ROSENBAUM: Yes, Your Honor. I was going to move my own exhibits. I don't know if you want to wait until after you admit the National Milk exhibits.

THE COURT: You know, yours are quick. I think, Mr. Rosenbaum, that would be an excellent idea.

Which exhibits would you like admitted into evidence?

MR. ROSENBAUM: Your Honor, I would move the admission of Hearing Exhibits 331, 332, and 333.

THE COURT: Is there any objection?

MR. HILL: No objection, Your Honor, but just with the caveat, of course, that some of these are counsel's representations within the numbers. So I just want to have that on the record, that some of these are counsel's representations of calculations and so forth.

THE COURT: Thank you, and I appreciate that. As with every exhibit, people should prove them to be true themselves. Do the calculations yourselves and see if you agree.

Ms. Hancock.

MS. HANCOCK: I have nothing further on it, Your Honor, just to complete the admission of those exhibits.

THE COURT: Very good.

Mr. English.

MR. ENGLISH: I think we may have now audio and not video, but let's keep going.

So I just wanted to say, because off the record we had this conversation as well, there were two documents that I discussed with the witness, MIG-322 and MIG-323, and we will not be moving admission at this time. We will have a witness to establish the foundation since 322 was derived from 301 but was our work from that, and 323 similarly was extracted. So rather than debate that, we'll have a witness who actually did that work testify about that at a later date. I just wanted to the record to reflect that.

THE COURT: Very good.

MS. HANCOCK: And, Your Honor, with respect to those last exhibits that Mr. English just mentioned, we don't have any objection to the admission of those exhibits if they were modified slightly in their title to reflect that it is MIG's work product or a worksheet or however they wanted to title it, but something that did not attribute it to National Milk. But, otherwise, we don't have any objection to the admission of those exhibits if we just want to complete that now.

MR. ENGLISH: With that, we will find a way to

resubmit -- they're electronic documents. I think we will resubmit the electronic ones as corrected, and we will make that modification.

And so with that, we will then say we would like them to be admitted. Right? Thank you, Your Honor.

THE COURT: You're welcome.

All right. As you have noted --

MR. ENGLISH: You nodded, Your Honor. You didn't say "yes."

THE COURT: Yes, Mr. English. Thank you. I love this crowd. It's a tough crowd but very enjoyable.

All right. As you know, I'm a little bit fussy about the way I admit the exhibits. I really do like to mention them in their own sentence. So -- and I like to look at them while I'm doing it to make sure I know what I'm doing.

All right. I admit into evidence Exhibit 310, 3-1-0, which is also Exhibit NMPF-37.

(Thereafter, Exhibit Number 310 was received into evidence.)

THE COURT: I admit into evidence Exhibit 311, that's 3-1-1, which is also NMPF-37A.

(Thereafter, Exhibit Number 311 was received into evidence.)

THE COURT: I admit into evidence Exhibit 312, 3-1-2, which is also Exhibit NMPF-37B, as in boy.

(Thereafter, Exhibit Number 312 was received into evidence.)

THE COURT: I admit into evidence Exhibit 313, 3-1-3, which is also NMPF -- when these kinds of glitches happen with the very most expert wizard, I feel comforted.

All right. I'm proceeding with regard to Exhibit 313. I admit it into evidence. It is also NMPF-37C, like cat.

(Thereafter, Exhibit Number 313 was received into evidence.)

THE COURT: I admit into evidence Exhibit 314, which is also NMPF-37D, like David.

(Thereafter, Exhibit Number 314 was received into evidence.)

THE COURT: I admit into evidence Exhibit 315, which is also NMPF-37E, like Eugene.

(Thereafter, Exhibit Number 315 was received into evidence.)

THE COURT: I admit into evidence Exhibit 316, which is also NMPF-37F, like Frank.

(Thereafter, Exhibit Number 316 was received into evidence.)

THE COURT: I admit into evidence 37 -- oh, excuse me -- 317, 3-1-7, which is also NMPF-37G, like good.

(Thereafter, Exhibit Number 317 was received into evidence.)

THE COURT: I admit into evidence Exhibit 318, which is also NMPF-37H, and we have referred to it continually through the testimony of Mr. Sims as his slides.

(Thereafter, Exhibit Number 318 was received into evidence.)

THE COURT: And I admit into evidence Exhibit 319, which is also NMPF-371 (sic).

(Thereafter, Exhibit Number 319 was received into evidence.)

THE COURT: I admit into evidence Mr. Rosenbaum's Exhibits 331, Exhibit 332, and Exhibit 333. Those three exhibits are admitted into evidence with the caution that anyone who wants to verify the numbers is wise to do so before utilizing those numbers.

(Thereafter, Exhibit Numbers 331, 332, and 333 were received into evidence.)

THE COURT: Now, I want to go to the exhibits that are 322 and 323.

And, Mr. English, I would like you to tell me what you plan to do with regard to those.

MR. ENGLISH: Your Honor, after consultations with National Milk Producers' counsel, we will be relabeling them as prepared by MIG, resubmitting them as corrected, and providing four hard copies for the record --

THE COURT: Now --

MR. ENGLISH: -- because they are Excel spreadsheets.

THE COURT: -- I'm looking at 322, which indeed is one of these large Excel spreadsheets, and with that caveat, I do admit into evidence Exhibit 322.

(Thereafter, Exhibit Number 322 was received

into evidence.)

THE COURT: Now refresh me as to what 323 is.

MR. ENGLISH: It is a much smaller document, only one page, but it is an extraction of the anchor cities.

THE COURT: Oh, yes.

Is there any objection to that being admitted into evidence?

MR. ENGLISH: I think, again, with my understanding, the caveat is we'll be labeling it prepared by MIG.

THE COURT: When you say "prepared by," are you saying "MIG"?

MR. ENGLISH: MIG, M-I-G, Milk Innovation Group. They were not prepared by me, I assure you.

THE COURT: Is there any objection to the admission into evidence of 323?

There is none. Exhibit 323 is admitted into evidence.

(Thereafter, Exhibit Number 323 was received into evidence.)

MR. ENGLISH: Thank you, Your Honor. And I think that was really good work among counsel.

THE COURT: Yes. I applaud you all for making my life way easier by your reasonableness. I appreciate it very much.

I also appreciate -- and I want to say that now -- the courtesy with which you all give us copies of documents that may have been admitted on the first day of

the hearing, so that we can see what you are talking about without digging through these voluminous stacks of the evidence. It's very helpful.

All right. We'll resume cross-examination -- oh, no, this is now going to be redirect.

Is this correct?

MS. HANCOCK: Correct.

THE COURT: Redirect of Mr. Sims.

Ms. Hancock, you may proceed.

MS. HANCOCK: Thank you.

JEFFREY SIMS,

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

REDIRECT EXAMINATION

BY MS. HANCOCK:

Q. And I will be very brief. There's just one part of your testimony I want to make sure is clear, Mr. Sims.

If you can turn to Exhibit 318, which is your presentation, and I want to talk about the slides of the example that you have that pertain to balancing the milk. And you had talked yesterday about the California example in Order 51, and I want to talk about another example just to make sure that we're clear on what it is that these are indicating. Is that fair?

A. Yes.

Q. Okay. So if we turn to Exhibit 318, I'm turning to page 47. And I want to look at Federal Order Number 5.

A. Can we put this up on the screen?

Q. Yeah. Thank you.

I know that you explained this yesterday, but this one took me a bit to wrap my mind around, and I thought if you could just maybe say it another time for us, about what -- what these slides are really telling us about balancing milk.

A. Okay. The -- the -- this is for all the orders -- the existing orders today, for the period of 2008 to -- through 2022, inclusive, I basically captured the USDA data on Class I producer milk for each order by month. And then simply for -- divided that number, say, January of 2008, I divided that number by 31, the number of days in the month. In a leap year, I divided February by 29, the other three years by 28.

So we were -- that calculation, a pure mathematical calculation, yields the daily average Class I producer milk by month for that however many year period.

Q. When you say daily average for the Class I producer milk, you mean daily average that's being delivered at the plant?

A. I wouldn't call it that. Producer -- Class I producer milk is how the plants used it. So this is the use of producer milk in Class I each month.

Q. Okay. And so -- so you have charted this on the blue line. Let's talk about the blue line first.

What is the blue line showing?

A. The blue line simply is a graphical representation of that daily average Class I producer milk by month for

the -- for the full period, each month of 2008 through 2022. So it -- the message here is that Class I producer milk moves up and down. It's dependent on whether schools are in session, whether -- you know, all kinds of weather events, the annual cycle of Class I demand. And so this -- the ups and downs show the variation by month of that statistic. And so the -- you know, what we see here is, again, substantial variation month to month to month in how much milk is used in Class I and pooled on the order. And that's the blue line.

And so for each calendar year, for each 12-month period, then I took and said -- compared to, say, for January 2018, and this is Federal Order 5, it looks like very nearly the end of the year, when you look at the red bars at the bottom, there is one space in each calendar year where there is no bar. So that represents the highest month of the year of that calendar year of daily average Class I producer milk.

So then for each other month of that calendar year, I compared the actual daily average to that high month. So every other month, if you, you know, pick out the high one, every other month by definition is less than that, and simply graphed in the bars the amount for each calendar year by which each month fell short of the maximum month for that year. And that's what the bars represent.

And you will note that in essence the bars and the blue line are mirror images of each other or they are

opposites. Where you have dips in the blue line, you have spikes in the red bars.

So you simply can infer that for -- in order to maintain the necessary milk to satisfy the single highest month of daily average Class I, all those other months had extra milk that had to be balanced. It had to go some place. In essence, if you want to think about it, awaiting the need for Class I. So this simply is a graphical representation of the monthly variation in Class I producer milk and that -- how that changes into the need to balance those supplies when those Class I needs are not there.

Q. So you had given an example early on in your testimony, days ago, that if you were going on a road trip, that you would fill your tank up with gas because you want to make sure that you have more than enough gas to be able get to your destination.

Do you remember that example you gave?

A. I do.

Q. Are the red bars on here, are these the reserves that you were equating to filling up your tank with gas?

A. Yes. These would represent the -- for each calendar year, the monthly reserve that was held or had to be held relative to the high month.

Q. And, obviously, fluid milk is much more perishable than a tank of gas, and so it adds to the complexities of the balancing when you have time windows within which you have to utilize that milk; is that fair?

A. Yes.
Q. Okay. And so this is just indicating that when the bars are high, your tank is full, and when the bars --
A. Yeah, I --
Q. -- are low --
A. -- guess that's a fair way to put it, yeah.
Q. And when the bars are low, that's when it's time to get to the gas station and refill?
A. Fair enough.
Q. Okay. Thank you for your time, Mr. Sims.
MS. HANCOCK: Your Honor, I have no further questions.
THE COURT: Did that examination of Mr. Sims prompt any other questions of Mr. Sims in the nature of cross-examination? I can call it re-cross.
No? Excellent.
Now, does this conclude this portion of Mr. Sims' testimony?
MS. HANCOCK: It does for us, Your Honor.
THE COURT: And when do you anticipate, just guessing, that you might call him as a witness again?
MS. HANCOCK: I'm hopeful it is in 2023.
THE COURT: Good answer.
MS. HANCOCK: I'm guessing it will likely be in the November window. It won't be this week.
THE COURT: Understood. Thank you so much.
Mr. Sims, I thank you. You have worked hard, and I appreciate it.

THE WITNESS: Thank you.

THE COURT: You may step down.

MS. HANCOCK: Your Honor, our next witness is Hunter Jensen with J.D. Heiskell and Company.

THE COURT: And would you read into the record, Ms. Hancock, J.D. Heiskell.

MS. HANCOCK: Sure. It's initials J-period-D-period, Heiskell, H-E-I-S-K-E-L-L, and Company.

THE COURT: Thank you.

And the witness is welcome to come to the witness stand and be seated in the witness chair.

And I'm looking at two different exhibits that we will need to mark, and I believe they have been distributed.

334 is the testimony? 334 is the testimony. 334. And this is also marked Exhibit NMPF-59.

(Thereafter, Exhibit Number 334 was marked for identification.)

THE COURT: And the other exhibit, which is charts, those -- that will be 335. Exhibit 335. Which is also designated NMPF-59A.

(Thereafter, Exhibit Number 335 was marked for identification.)

THE COURT: And we're going to take just a minute to set up the connection of the laptop to our screen here.

And let's go off record and stretch for five minutes while we do that. We go off record at 8:30.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record.

We're back on record at 8:34.

I would like the witness to state and spell his name.

THE WITNESS: My name is Hunter Jensen, H-U-N-T-E-R, J-E-N-S-E-N.

THE COURT: Have you previously testified in this hearing?

THE WITNESS: No.

THE COURT: I'd like to swear you in. Would you raise your right hand, please.

HUNTER JENSEN,

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

THE COURT: Thank you.

DIRECT EXAMINATION

BY MS. HANCOCK:

Q. Good morning, Mr. Jensen. I'm Nicole Hancock with National Milk.

Would you please provide the record with your business address? It's your mailing address.

A. 17220 Wright Street, W-R-I-G-H-T, Street, Suite 200, Omaha Nebraska 68130.

Q. Thank you for that.

Mr. Jensen, did you prepare some testimony in support of your -- or did you prepare a statement in support of your testimony today?

A. Yes.

Q. And we have identified your written statement as Exhibit 334, and then you have some slides that have been identified as Exhibit 335.

Could you provide us with your written statement, and just be mindful of the pace of reading it so that our court reporter can capture everything that you are saying.

A. Yes.

My name is Hunter Jensen, and I'm a market analyst at J.D. Heiskell and Company, also known as JDH. Established over 137 years ago, in 1886, JDH is a privately held company that operates within the agriculture industry. My role at JDH is inside the market research group where I gather data such as USDA reports and other relevant market information, and provide that information to the team at JDH in a clear and concise manner. One of the those items we monitor is local basis data.

JDH has a deep history in the agricultural and dairy industries. Our company's legacy is deeply intertwined with the growth and progress of these sectors. JDH is one of the largest dairy feed manufacturers by volume and operates in key dairy shed areas across the United States. Our assets are in California, Colorado, Texas, New Mexico, Idaho, and New York. In each of the regions we serve dairy, cattle, and poultry customers, with the largest end users being dairies. JDH's company core focus is getting the right product to the right place at the right time.

Dairy Farmers of America (DFA) asked JDH to provide data on corn basis, soybean meal basis, and DDG (dried distillers grains) price delivered into Colorado and California. All three of the products play a significant role in the typical dairy ration. Soybean meal is a byproduct of the soybean crushing industry where soybeans are processed, resulting in soybean oil and soybean meal. DDG is a byproduct of the ethanol industry where corn is turned into ethanol and the other major product is DDG, which are then dried on site to increase product life and reduce shipping costs. DDG is not a hedged commodity, meaning there is no futures market to hedge against.

In the context of feed prices, there are many distinct factors that come into play. The commodity and whether that commodity is hedged are two of those factors. Hedged commodities are priced via a basis plus the "board." The "board" represents the futures price of the specified commodity via the Chicago Board of Trade. The "basis" is the difference between the cash price or local market price and the futures price (board).

THE COURT: Now, you have in parentheses "board." Could you just explain why that is significant?

THE WITNESS: "Board" just represents the Chicago Board of Trade, which is what these futures are being traded on.

THE COURT: Thank you.

THE WITNESS: Basis can fluctuate due to several

factors, such as local supply and demand conditions, storage costs, transportation expenses, and regional market dynamics. The basis reflects the local market's unique circumstances compared to the broader commodity market, and these circumstances influence the purchase price that producers pay for their feed.

To compile the basis data for livestock feed in Colorado and California, JDH utilized a combination of data sources. We track internal contract prices, observe outside market prices, and pull data from industry partners. Additionally, we leveraged our broad network and experience in the feed and grain industry to ensure the accuracy and reliability of our data.

Colorado and California are both destination markets. A destination market is where local demand for products is much larger than the local supply for that product. One large component affecting destination market feed prices and local basis prices is transportation costs. Transportation costs over the last 15-20 years have routinely increased.

What we observed when we collected our data is that the price difference between origin and destination markets has increased over time.

Now I'd like to get the slides up if that's all right.

And I refer to slide 1, and this is our title slide. Would it be all right if I -- if that could be slide 0. This is what I really would like to reference.

MS. HANCOCK: Just so our record is clear, this is Exhibit 335.

THE COURT: Very good. Now, the slide that you are showing us doesn't actually have a number on our printed copy.

THE WITNESS: Sure.

THE COURT: So identify it by its title and so forth as you proceed.

THE WITNESS: Okay. Sure.

JDH Observed Corn Basis. We show the corn basis in three different areas: Southwest Iowa, Colorado, and California. In this chart you can see how over time the trend of corn basis has been up, with transportation costs being a contributor.

Corn Basis Price Difference Vs. Iowa. We compare corn basis prices delivered into the destination markets of Colorado and California versus the basis price in Southwest Iowa. We do this by taking the basis price for each market and subtracting the price in Southwest Iowa. This chart shows the trend of a faster rate of increase in basis prices in Colorado and California versus Southwest Iowa. The rate of increase was gradual from 2010 to 2020 with a more rapid increase from 2020.

THE COURT: Now, I didn't mean for you not to say slide 2 --

THE WITNESS: Oh, sure.

THE COURT: -- or slide 3. I just meant for you to make sure we also had the title.

THE WITNESS: Okay. Sure.

So this was slide 1, JDH Observed Corn Basis.

That's slide 2, Corn Basis Price Difference Vs. Iowa.

JDH Observed Soybean Meal Basis. Slide 3 shows the soybean meal basis in three different areas: Western Iowa, Colorado, and California. In this chart you can see how over time the trend of soybean meal basis has been up. Data for these markets was less readily available internally, with Colorado and California only going back to 2016.

Soybean Meal Basis Price Difference Vs. Iowa. Slide 4, we compare soybean meal basis prices delivered into the destination markets of Colorado and California versus the basis price in Western Iowa. We do this by taking the basis price for each market and subtracting the price in Western Iowa. This chart shows the trend of a faster rate of increase in basis prices in Colorado and California versus Western Iowa. Since 2020, the basis prices in Colorado and California have increased at an even faster rate.

JDH Observed DDG Prices. Slide 5, we compare DDG prices (non-hedgeable) in each of the markets: Southwest Iowa, Colorado, and California. Because DDG is not a hedgeable commodity, the chart illustrates the all-in price of DDG, which can fluctuate more due to the broader market circumstances.

DDG Price Difference Vs. Iowa. Slide 6 shows the

DDG price delivered into Colorado and California versus the price in Southwest Iowa. In this chart you can see the trend for California is an increase in price versus Southwest Iowa at a consistent rate year over year, with many spikes due to the transportation issues in the last few years. Additionally, Colorado has seen only a gradual increase in DDG costs compared to Southwest Iowa.

Corn Grain and Silage & Hay Acres Harvested, California. And here I'm referencing slides 7 and 8, which will be both this and corn grain and silage and hay acres harvested, Colorado.

Slide 7 and 8, USDA NASS (National Agricultural Statistic Service) data detailing the decreasing acreage of corn, silage, and hay in both California and Colorado over time. In California, many of the acres have switched to tree nuts or vegetables while also losing acreage to increasing population areas. Colorado has also lost acreage as population dense areas have increased and land has become more valuable, being repurposed away from agricultural production. This has also contributed to the increase in local prices over time in Colorado and California.

Transportation Costs, Central Nebraska to Central San Joaquin Valley, California. Slide 9 shows transportation costs from Central Nebraska to Central San Joaquin Valley, California. This chart shows the steady freight rate increases. Since 2016, transportation costs have increased over 18%.

In summary, California and Colorado are both destination markets for corn, soybean meal, and DDG, bringing in most of their consumption used in dairy feed from other states. Based on the data that we were able to gather, local feed prices in California and Colorado have increased at a more rapid rate compared to Western and Southwest Iowa due to an increase in transportation costs, as well as a decrease in localized supply in California and Colorado.

MS. HANCOCK: Thank you, Mr. Jensen.

Your Honor, we would make him available for cross-examination at this time.

THE COURT: Thank you.

CROSS-EXAMINATION

BY MS. VULIN:

Q. Good morning, Mr. Jensen. How are you?

A. Good.

Q. Good. My name is Ashley Vulin. I'm an attorney. I represent the Milk Innovation Group. Thank you for being here with us.

So are you familiar with Federal Milk Marketing Orders?

A. No. I can't say that I am.

Q. Do you know what "Class I" means?

A. Somewhat. I have a general understanding that it is milk. Fluid milk, I believe.

Q. "Class III," do you know what that means?

A. No.

Q. Okay. That's all right. Not a quiz. Just trying to get the scope of your expertise and understanding.
A. Sure.
Q. So you're here to testify about the cost of feed, right?
A. Yes.
Q. Is there anything in particular that you want USDA to do with that information?
A. No.
Q. And so you're not here to advocate that USDA change prices in any way to reflect changes in costs of feed?
A. No.
Q. And you compare the feed costs in Colorado and California and then compare those to different parts of Iowa, correct?
A. Yes.
Q. How did you select those states to compare?
A. JDH was asked by DFA to bring basis data for Colorado and California, and Iowa was at the recommendation of JDH, as that's a state we have experience trading out of.
Q. Okay. And why did you recommend Iowa?
A. JDH has -- we ship a lot of corn, DDG, and soybean meal out of Iowa.
Q. All right. So it was selected not necessarily because it was a comparator, but because you had a wealth of information?

A. And it's also an origin market, and here we're comparing origin markets -- at the origin market of Iowa to destination markets of Colorado and California. And so that was part of it as well.

Q. So Colorado and California were selected by DFA as -- and you were requested to look at those.

And did they request that you look also then at an origination market?

A. I can't say for certain. I don't recall. I know that Iowa was put forth by JDH at JDH's recommendation. But that was requested by DFA.

Q. That there be another state that is an origination state that could act as a comparator?

A. Yes.

Q. And I believe that you are not actually comparing pure costs between the states; is that right? You are looking at basis?

A. Basis prices. Yes.

Q. And tell me one more time when you mean by basis prices or how those are different than kind of the price at which you would purchase this product on the open market?

A. Sure. So the board represents the futures price of the specified commodity via the Chicago Board of Trade, and the basis is the difference between the cash price, or local market price, and the futures price.

Q. And why is that more relevant to consider as opposed to the market price? Why did you select that

metric?

A. It fluctuates due to several factors, including local supply and demand conditions, storage costs, transportation expenses, and regional market dynamics. It takes these things into account in the local market.

Q. So looking at basis kind of makes it more of an apples-to-apples comparison?

A. Apples to apples, I -- can you rephrase that? I don't quite understand.

Q. Yeah. What I'm really getting at is I'm just trying to understand the methodology of why you would look at the prices and compare them to the CME futures price as opposed to just saying, this is how much, you know, a bushel of hay costs in California, and it's $5 higher than if you purchase it in Iowa.

A. Basis I believe is a good representation of the local prices, what those commodities are trading for in the local market.

Q. As opposed to just the purchase price?

A. Yes.

Q. And we have learned a little bit about hedging in this proceeding.

So when you are talking about CME or the basis, you are looking at if someone wanted to hedge these products, what is the price on the open market for that? Is that a fair way to describe that?

A. Can you repeat the question?

Q. Yeah. When you are talking about comparing it to

basis based on the futures market, right, in the CME?
A. Yes.
Q. Then you are comparing it to, if I wanted to buy a futures contract on the open market, what is the open market valuing that at for six months out or something like that; is that --
A. Yes.
Q. -- is that accurate?
A. Yes.
Q. Okay.
A. The "open market" being the Chicago Board of Trade.
Q. Great. Thank you.
And so in your experience is -- is hedging on the CME an important part of managing feed costs for farmers?
A. I -- I can't speak to that. I don't have any experience with that.
Q. And so when we're talking about the prices compared to the basis, really what we're talking about is the difference, right? So these aren't absolute prices, these are the difference in the prices vis-à-vis what the basis price is?
A. What does "vis-à-vis" mean? I don't --
Q. I can rephrase.
A. Sure.
Q. So when I'm looking at your charts, for example, the first page, "JDH Observed Corn Basis." Obviously since it is negative, this is not reflecting the actual

price for the corn, this is reflecting the difference in the price offered in Iowa, Colorado, or California in comparison to the CME price?

A. Yes.

Q. Okay. And you described certain market forces that cause the price of feed to change in Colorado and California.

Can you go through those for me again, please?

A. Local supply and demand conditions, storage costs, transportation expenses, and regional market dynamics.

Q. And then you say, based on that data, that the California and Colorado prices have increased at a more rapid rate compared to parts of Iowa; is that right?

A. Based on what data? Based on the data -- based on what data? I guess I'm not allowed to ask questions, I'm sure. Can you explain what you mean by that?

THE COURT: Actually, here you are.

THE WITNESS: Okay.

THE COURT: We're not formal. We just want to understand.

THE WITNESS: Okay. Sure.

BY MS. VULIN:

Q. Yeah. So if I ask you something that you don't understand or that's not making sense, and you have done a good job so far, you can ask me to rephrase it or clarify.

A. Okay. Sure.

Q. So really what I'm just trying to confirm is that you believe these local market forces have caused the

price of feed to increase more rapidly in Colorado and California than in Iowa?

A. Yes.

Q. And your conclusions here are just limited to California and Colorado, correct?

A. Yes.

Q. And even those, you are not providing kind of an independent or isolated analysis of those states, it is just a comparison to how the prices changed in Iowa; is that right?

A. We do provide independent basis prices from both Colorado and California independent from Iowa prices, in slide 1, in slide 3, and slide 5.

Q. And those are, though, also only in comparison to the CME, correct?

A. In comparison to the CME, yes.

Q. And you're not offering any conclusions about a nationwide cost of feed for farmers, correct?

A. No.

Q. Or any nationwide change in the cost of feed for farmers over time?

A. We talk about some of the factors that play into basis prices, transportation costs being one of them. Transportation costs have gone up, I'm sure, across more than just Colorado and California. And so although it would affect those states, I'm making claims about California and Colorado.

Q. But you don't have any data in here that shows

that the basis price has gone up over time, correct?
A. No.
Q. And you are not --
THE COURT: Because of the double negative, I want to make sure I know what he just said. So would you ask him again?
MS. VULIN: Yes.
BY MS. VULIN:
Q. I didn't see any data in here that reflects any evidence or information about any change in the basis risk over time. Is that right?
MS. VULIN: Did I double negative again?
THE COURT: No. You did good.
THE WITNESS: The evidence for basis risk over time in -- outside of Colorado and California; is that right?
BY MS. VULIN:
Q. Yes.
A. Yeah. That's correct.
Q. And is the cost of feed uniform across the country?
A. No.
Q. And is the cost of feed uniform for all farmers in one geographic region?
A. No.
Q. And you would agree with me that Colorado and California are very different marketplaces than Iowa, correct?

A. Yes.
Q. So you weren't surprised in any way that the cost of feed was more expensive in California than in Iowa?
A. I wasn't surprised that it was different than Iowa.
Q. You were?
A. Weren't.
Q. You were not.
A. Were not.
Q. And you are not here offering any conclusions about the cost of feed in Idaho or Pennsylvania or Florida, correct?
A. No.
Q. Were you asked to look at any of those states?
THE COURT: When she said correct, and you said no --
THE WITNESS: Oh.
THE COURT: -- I -- yes. So --
THE WITNESS: Correct.
THE COURT: Correct. Good. Thank you.
BY MS. VULIN:
Q. Were you asked to look at any of those states?
A. No.
Q. And the conclusions that you have here, did you develop those just for this hearing or were those developed to your understanding to support the proposal development of the proposals discussed at the hearing?
A. Can you rephrase that?

Q. Yeah. We have -- we're here, right, discussing certain proposals to change the price of -- the formulas that regulate the price of milk.

A. Yes.

Q. And what I want to know is was this data developed only -- well, maybe let's start here. When did you do this analysis?

A. About four or five months ago at the request of Ed Gallagher from DFA.

Q. And to your knowledge, was this data developed in order to be used in the development of proposals here or just for the hearing that you are testifying at today?

A. I'm -- I'm still not quite sure. I -- I'm not sure. I am here to present basis data. That's what I know.

Q. Okay. And are you aware if NMPF used any of this data in the development of the proposals they submitted to USDA?

A. I'm not aware.

Q. And are you aware of Federal Order prices ever taking into consideration the cost of feed in the Class I minimum price?

A. Can you repeat the question?

Q. Sure. Are you aware of Federal Order prices ever taking into consideration feed costs in the Class I minimum price?

A. I'm not familiar with --with the milk pricing or any of that.

Q. So you have no knowledge of that being done before?

A. I would assume it -- it would -- feed costs are -- play into milk pricing, sure. But I don't have any knowledge of the -- of milk pricing, no.

Q. And are you -- in your experience in the feed industry, are you aware of there being any substantive differences in the types of feed dairy cows would eat when their milk is being used for cheese as opposed to fluid milk?

A. I'm not aware.

Q. You are not aware of any differences?

A. No.

Q. So in your experience, are you aware of the ultimate use of the milk, you know, setting aside organic, right, because we know that would impact the type of feed, or grass fed or things like that. But in terms of the use for cheese or yogurt or fluid milk, are you aware of there being a different kind of feed that farmers would use depending on the ultimate use of their milk?

A. I'm aware that there's a difference. As to the specifics of what that dairy ration would be, no.

Q. And so if a certain price is sufficient to cover the cost of feed for an operation whose milk is used for cheese, you would presume that price would also be sufficient to cover the cost of feed for an operation whose milk is used for fluid milk?

A. I can't speak to dairy farmers or how they

operate. I understand the feed basis prices a lot better than that.

Q. So you are not aware in your experience in the dairy feed industry of there being a difference in how the feed is used depending on the ultimate use of the milk?

A. No.

MS. VULIN: Nothing further. Thank you.

THE COURT: Are there other cross-examination questions? I will be turning to the Agricultural Marketing Service if no one else wants to go first.

I see no other questions, so I invite the Agricultural Marketing Service questions.

MS. TAYLOR: Thank you, Your Honor.

CROSS-EXAMINATION

BY MS. TAYLOR:

Q. Good morning.

A. Good morning.

Q. Just a few questions. On your charts, for most of them you compared California and Colorado to Southwest Iowa prices, and you say the trend is faster than -- in those states than in Iowa.

So I'm just trying to take that one step further about what's the take-away from that, which I don't think is covered in your written testimony.

A. You are asking why we're comparing to Iowa or --

Q. Right. So if you are looking at basis, what I take from your charts are the basis in California and in Colorado is increasing at a faster rate than the basis in

Iowa.

A. Yes.

Q. And so I want to take that kind of one step further to say kind of, then, what is the take-away from that that we should see through that information?

A. These basis prices have gone up more rapidly than Iowa, meaning there have been more costs, higher costs, playing into the basis prices in those two states, including, as we say, transportation costs. The transportation cost to get from Iowa to Colorado and California have increased over time.

Q. So I know you in questioning from Ms. Vulin said that you picked Iowa because it's an origin --

A. Yes.

Q. -- location.

And I just -- so is that an actual origin location from where feed goes to Colorado and California?

A. Yes. JDH ships corn, DDG, and soybean meal to Colorado and California.

Q. From Iowa?

A. Yes.

Q. Okay. And in some places you used Southwest Iowa; in other places it's Western Iowa, for example, in the soybean meal price. I don't operate in the grain world, so can you just explain why there are kind of different locations that you are using.

A. It was because of the availability of data, where we collected the data from. We have some partners in Iowa

where it was easy to collect from, and sometimes it was not as easy to collect the data for that timeframe.

Q. Okay. And when you say "partners," can you just -- I don't want to know who necessarily, that's confidential, but just explain who those partners are generally.

A. I'm not sure if I can answer that without giving away anything. Processors, suppliers, customers, people that we -- that we deal with. These are traded prices.

Q. Okay. And so the basis data you are looking at in here is a combination of that with your own JDH data?

A. Yes.

Q. Okay. You mentioned under slide 5, which is the DDG price, an all-in price of DDG. Can you explain what that is, and why it's different than the other ones we're looking at?

A. The input costs associated with the all-in price of DDG include cost of corn, natural gas, enzymes, electricity, labor, water. And it's a lot more -- there are a lot more things that play into the all-in price of DDG versus the basis price. The basis price is more closely related to the local market.

Q. Okay. And you mention DDG is not hedgeable, doesn't have anything to hedge against.

A. Yes.

Q. So -- okay, now I -- it's more like a total cost rather than just the variable local cost --

A. Yes.

Q. -- that's the basis -- okay.

I wanted to turn to your last slide 9, the transportation costs. Yeah.

My first question is this -- on the Y axis has dollars. But is this dollars for tonnage? Like, what are we looking at here?

A. That's dollars per rail car.

Q. Per rail car.

And that's typically how feed is moved?

A. Typically. There's trucking as well. And barges.

Q. And how come in this instance we have Central Nebraska to Central San Joaquin Valley?

A. That was also due to the data being more readily available for those locations.

Q. Okay. But Central Nebraska is another kind of origin location?

A. Yes.

Q. Okay. I think at the end you are saying that most of this variability in cost is due increased transportation costs and decrease in localized supply, which is I think what the acreage chart was telling us.

Can you talk a little bit about transportation costs and kind of what goes into why that is so variable lately?

A. There's been a lot of different factors that play into transportation costs. I can't say for certain.

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

THE COURT: Are there any other questions for

Mr. Jensen that were prompted by the questions from the Agricultural Marketing Service?

I see none.

MS. HANCOCK: Your Honor, I have no further questions at this time. We would move for admission of Exhibits 334 and 335.

THE COURT: Is there any objection to the admission into evidence of Exhibit 334?

There is none. Exhibit 334 is admitted into evidence.

(Thereafter, Exhibit Number 334 was received into evidence.)

THE COURT: Is there any objection to the admission into evidence of Exhibit 335?

There is none. Exhibit 335 is admitted into evidence.

(Thereafter, Exhibit Number 335 was received into evidence.)

MS. HANCOCK: Thank you so much for your time today.

THE WITNESS: Thank you.

THE COURT: Thank you very much, Mr. Jensen. This is a new look for me. Thank you.

MS. HANCOCK: Your Honor, our next witness will be Dr. Eric Erba.

THE COURT: Let us mark those exhibits, and then we'll take a ten-minute break before we actually take his testimony.

I'm looking at Exhibit NMPF-38 Amended and NMPF-38A and NMPF-38B. So our next number would be 336. I'm going to assign 336 to -- which one would you like, Ms. Hancock?

MS. HANCOCK: Amended NMPF-38, which is the written testimony.

THE COURT: Good. So that will be 336.

(Thereafter, Exhibit Number 336 was marked for identification.)

THE COURT: And then the next one would be the 38A; is that correct?

MS. HANCOCK: Yes.

THE COURT: That will be 337. 337 is the 38A.

(Thereafter, Exhibit Number 337 was marked for identification.)

THE COURT: And 338 is the 38B.

(Thereafter, Exhibit Number 338 was marked for identification.)

MS. HANCOCK: Your Honor, we also have a demonstrative map that shows National Milk's proposed price differentials. This was already admitted into Dr. Vitaliano -- or I guess it hasn't been admitted yet because we haven't concluded his testimony. But it's in Dr. Vitaliano's testimony, and then it also includes the current Class I differentials. I don't know if for ease of reference if we should just mark it as a number or if we just want to refer to it.

THE COURT: So he -- he referred to it, but we

didn't give it a number?

MS. HANCOCK: It's embedded in Dr. Vitaliano's written testimony.

THE COURT: I think we should give it a number.

MS. HANCOCK: Dr. Vitaliano's testimony is Exhibit 299. So I guess if we're going to mark -- we just pulled out a bigger map of it. It is Exhibit 339 then?

THE COURT: Yes, let's do that. We'll highlight a portion of Exhibit 299 by giving it its own number, and it will be Exhibit 339.

(Thereafter, Exhibit Number 339 was marked for identification.)

THE COURT: Good. Let's take a ten-minute break. Please be back at 9:25. We go off record at 9:13.

(Whereupon, a break was taken.)

THE COURT: Please come to order. Let's go back on record.

We're back on record at 9:25.

The witness is in the stand. I'd like to have you state and spell your name.

THE WITNESS: Eric Erba, E-R-I-C, E-R-B-A.

THE COURT: And your doctorate is in what field?

THE WITNESS: Agricultural economics.

THE COURT: And have you previously testified in this proceeding?

THE WITNESS: I have not.

THE COURT: I would like to swear you in. Would you raise your right hand, please.

ERIC ERBA, Ph.D.,

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

DIRECT EXAMINATION

BY MS. HANCOCK:

Q. Good morning, Dr. Erba. Thank you for patiently waiting so long to get on the stand.

Could you provide your business address for the record, please?

A. 1035 Medina Road. That's spelled M-E-D-I-N-A. That's in Medina, Ohio, again, M-E-D-I-N-A, 44256.

Q. And we have already marked as exhibits your testimony as Exhibit 336.

That's what you prepared in support -- that's the written statement that you prepared in support of your testimony?

A. Yes.

Q. And then Exhibit 337, that's titled "Cost Factors For Farm Buildings," what is that document?

A. The -- that document, plus the one that's similar to it, are two documents put out by entities that helped us think through what kinds of things we need to consider, physical asset-wise, when you convert from a Grade B dairy to a Grade A dairy. So they are both just guideline documents to make sure that we're on the right track and we are capturing all the right assets that need to be constructed or acquired.

Q. Okay. So Exhibit 337 is the one that's titled

"Cost Factors For Farm Building, 2009 Edition"; is that right?

A. That's right.

Q. And then the second one you are referring to is Exhibit 338 titled "Dairy Modernization," from the University of Wisconsin-Extension Dairy Team?

A. Correct.

Q. And then the last exhibit that we have identified as Exhibit 339, the first page is just a map of the current price differentials from USDA's website; is that right?

A. That's correct.

Q. And then the second page is just the map of what National Milk is proposing under Proposal 19?

A. Correct.

Q. Okay. Would you provide us with an overview of your educational background, please.

A. Certainly. I have a Bachelor's and Master's degree in animal science from University of California Davis, and a Ph.D. in agricultural economics from Cornell University.

Q. When did you obtain your Ph.D.?

A. 1997.

Q. And after obtaining your Ph.D., can you give us an overview of your professional -- of your professional work?

A. Certainly. I -- after I finished my Ph.D. work at Cornell University, I worked for ten years for the

Department of Food and Agriculture in California as a dairy economist. And then moved to California Dairies, Inc., a milk marketing cooperative based in California. I spent ten years there as a senior vice president of -- sorry -- chief strategy officer and senior vice president. And then, in 2017, started with Dairy Farmers of America out of the Mideast Area, based in Ohio.

Q. Okay. And throughout the course of your career, have you written any publications or been involved in any kind of additional work in the industry other than just the normal course of your -- of your employment?

A. Yes. When I was at Cornell University, I wrote a -- authored or co-authored a number of articles, so -- which have been referenced in this hearing. I'm the United States Dairy Sector assimilator. I also did some work with farm management, in that case looking at excess capacity milking parlor and how you might use that most effectively. I have done some work with milk hauling costs, some work with fluid milk plant costs, all coming from Cornell University.

Q. Okay. And so the work that you did on the USDSS modeling, can you tell us about that?

A. Sure. That was a large part of my dissertation work, and as has been spoken to many, many times here, that is a -- very much an iterative process. So with each iteration, something is improved, something is better.

And part of what I did was put in the -- what was previously the hauling costs were just a straight line

linear function. I improved that by putting in a curvilinear function, which is more representative of what hauling costs really are.

I also did some work with the gross vehicle weights on -- by state by state to make sure that you could haul the biggest loads possible. And then, of course, with each iteration, we added more -- more nodes, more arcs, which required cities and mileages and trying to link everything together. So good graduate student type work.

Q. You were here when Dr. Nicholson testified about the modeling that he performed on behalf of National Milk?

A. I'm sorry. Could you say that again?

Q. Sure. Were you here when Dr. Nicholson testified about the modeling that he performed on behalf of National Milk?

A. Yes.

Q. And he talked at some point in his testimony about how the model had improved, and I think he specifically referenced the improvements in the transportation modeling information that was included in that -- the arc of transportation.

Is that the work that you did as part of your Ph.D.?

A. I would say my work was a precursor to what's been done. Keep in mind my dissertation was done 25-ish years ago, and they have made improvements since then. So I would say it was a step along the way, but I don't have

any illusions that what I did is still there.

Q. Okay. Because you understand that they just continued to improve on that the best that they can?

A. Yes. Absolutely.

Q. Okay. And -- and you participated in and co-authored some of the publications that supported the USDSS modeling?

A. Yes.

Q. Okay. So you have -- your Ph.D. level of experience was based on the work that you did in that -- in that modeling back in 1997?

A. Yes. That was a -- a large piece of what I did was -- in my dissertation was gather all of the individual studies and work that I did, and compile them, and basically those were separate chapters in what eventually became my dissertation.

MS. HANCOCK: Your Honor, at this time we would ask to qualify Dr. Erba as an agricultural economist as well as a transshipment model expert with the USDSS modeling.

THE COURT: Tell me again the letters for the modeling?

MS. HANCOCK: U-S-D, like David, S-S.

THE COURT: Someone coughed. U-S-D --

MS. HANCOCK: -- S-S.

THE COURT: S-F.

THE WITNESS: S-S.

THE COURT: S-S. U-S-D-S-S.

THE WITNESS: United States Dairy Sector Simulator.

THE COURT: Does anyone wish to voir dire Dr. Erba with regard to his qualifications as an expert in those fields?

No one does.

Does anyone object to my accepting Dr. Erba as an expert in those fields?

No one does.

I do accept Dr. Erba as an expert in the field of agricultural economics and as an expert in trans -- transportation -- no --

THE WITNESS: Transshipment.

THE COURT: -- transshipment with the USDSS model.

Is there any other area of expertise, Dr. Erba, that you want me to be particularly aware of?

THE WITNESS: Not at this time, no.

THE COURT: Thank you.

You may proceed.

MS. HANCOCK: Thank you.

BY MS. HANCOCK:

Q. Dr. Erba, would you please provide us with your statement?

A. My name is Eric Erba. This testimony is presented in support of Proposal 19, update the Class I differentials throughout the United States, as proposed by National Milk Producers Federation. I am representing the Mideast Area of Dairy Farmers of America, a

Capper-Volstead, nationwide milk marketing and milk processing cooperative.

DFA is comprised of seven milk marketing areas across the U.S. DFA's Mideast Area supplies the raw milk and intermediate dairy product needs for pool and non-pool plants located Michigan, Ohio, and Indiana, as well as parts of Kentucky, Pennsylvania, and West Virginia. As of June 2023, DFA's Mideast Area had 828 member farms located in the six aforementioned states, producing about 20 million pounds of milk per day.

I'm going to skip my education and experience section since we already covered that, and I'll go right into a description of the Mideast Area.

THE COURT: So we're now on page 2?

THE WITNESS: We are on page 2, correct.

The geographic boundaries of the Mideast Area roughly match those of Federal Milk Marketing Order Number 33 and a small portion of Federal Milk Marketing Order Number 5. It is comprised of six states, in whole or in part: Michigan, Ohio, Indiana, Kentucky, Pennsylvania, and West Virginia. The principal milk supplies of the Mideast Area are found in Central and Northeast Michigan, Northern Indiana, and Northwestern Ohio. Class I plants are scattered throughout the Mideast Area but are typically close to large cities, for example, Detroit, Grand Rapids, Indianapolis, Columbus, and Pittsburgh.

The Mideast Area also has many small- to medium-sized cheese plants in Northeast Ohio, two large

cheese plants in Central and Western Michigan, and one large cheese plant in Eastern Pennsylvania.

Sorry, that should be Western Pennsylvania.

THE COURT: Let us take a moment just to tend to that right now. We're on Exhibit 336. We're going to make a correction on page 2. It's within the first full paragraph, three lines up from the bottom of that paragraph. I'm going to strike the word "Eastern" and replace it with "Western."

And so would you, Dr. Erba, just read that line beginning with "plant."

THE WITNESS: "Plant in Western Pennsylvania."

THE COURT: Thank you.

THE WITNESS: You would never know I have read this 15 times.

THE COURT: Your brain knew what it was supposed to say. It is a -- I don't know, it's a failing.

THE WITNESS: It is a failing. I agree with that.

Milk powder plants and milk condensing plants are more numerous in north and west of the Mideast Area. Over the last 25 years, the market has become increasingly milk deficit to the south (toward Kentucky) and to the east (toward Pennsylvania).

Regions with established dairy industries tend to evolve steadily, and the Mideast Area is no exception. While the Mideast Area shares much of the same geography with Federal Milk Marketing Order Number 33 plus a small portion of Federal Order Number 5, I will use Federal

Order Number 33 published statistics to describe the Mideast Area.

And if I could get you to show the tables. Perfect.

Over the past 23 years, the Mideast Area has realized a 20% increase in milk produced but shipped from 66% fewer dairy farms. There are fewer supply and distributing plants operating in the Mideast Area. The average Class I utilization has decreased, as has the average producer price differential. The average uniform price has nearly doubled since 2000.

The Mideast Area milk supply has grown substantially since 2000, particularly in Michigan, Northwestern Ohio, and Northern Indiana. At the same time, the milk supply has decreased significantly along its southern and eastern edges. Even a casual observer can confirm that the milk sheds and the milk processing locations are growing more distant from each other. Processing plants that were at one time located in the middle of significant milk sheds have found themselves with diminishing abilities to attract enough local milk to satisfy their daily, weekly, monthly, and seasonal needs. Also, milk processing locations in the southern and eastern parts of the Mideast Area have expanded, compounding the problem of being able to attract an adequate supply of local milk.

Within the last ten years, two grocery store chains have built Class I plants in Tipp City, Ohio (west

central Ohio) and Fort Wayne, Indiana (northeast Indiana). The addition of these plants may have contributed to the closure of two Michigan Class I plants in Evart and Livonia. The Michigan plants were located closer to milk supplies, but the Tipp City, Ohio, and Fort Wayne, Indiana Class I plants are located more strategically, being closer to population centers.

The implication with the more strategic positioning of the plants is that bulk raw milk must travel further from supply points to reach these plants. The mileage difference is significant. Tipp City is 350 miles south of Evart and 200 miles southwest of Livonia, and Fort Wayne is 250 miles south of Evart and 165 miles southwest of Livonia.

Construction of a cultured dairy product plant in Wooster, Ohio (Northeast Ohio), the expansion of a Class II processing plant in West Central Ohio, and the expansion of a Class I plant in Northeast Ohio, have also contributed to the widening gap between the locations of milk supplies and locations of milk processing plants within the Mideast Area. The recent addition of a large cheese plant in Central Michigan (started production in October 2020) has provided a local outlet for Michigan milk, making it more challenging to encourage milk to leave the state and move long distances to demand points to the south and to the east.

I'm going to take a little break here and explain that Steve Zalar and I collaborated on Tables 3 and 4

before he was asked to participate as a witness. He's covered these tables, albeit he used a 300-mile route and I used 100-mile route. But the data came from the same source, and he's already spoken to that. So I'm going to skip ahead to page 6. And I'll start at the top of page 6.

Current Class I pricing zones in the Mideast Area are too large geographically and do not reflect today's cost of moving bulk milk, a cost which is borne by producers. When attempting to move milk to satisfy Class I customers order requirements, Class I differentials are the main regulatory tool available to incentivize milk movements. Clearly, they must be set at levels high enough to encourage milk to move, at times, significant distances. The current Class I differentials fail this basic test. Simply, there is not enough of a "slope" or price difference to encourage or to facilitate movement of milk from supply sources to receiving points.

A good example of the lack of slope is the $1.80 per hundredweight pricing zone that stretches an incredible 550 miles from Marquette, Michigan to Huntington, Indiana. The implication is that the milk in Marquette, Michigan, has the same relative value as milk in Huntington, Indiana. This makes no sense in today's milk marketing world. When Class I differentials are set too low, as they are currently, the responsibility and costs to supply milk to customers distant from milk sheds shifts to cooperatives and their farmer-owners.

I want to describe the process that we used in the Mideast Area to develop the Class I differential surface.

My colleague, Jeff Sims, provided an extensive recounting of the process used to establish Class I differentials across the U.S. I will reference that process briefly to segue to the process used in the Mideast Area specifically. The foundation of the process to assess Class I differentials came from work done by Drs. Mark Stephenson and Chuck Nicholson at the University of Wisconsin. Their dairy transshipment model, the United States Dairy Sector Simulator (USDSS), solves the problem of efficiently moving milk from supply points to processing plants and then moving finished dairy products to demand points.

A secondary output generated by USDSS is a list of relative values for milk at specific locations. As such, the relative incremental value of milk for Class I usage can be used to develop a Class I price surface covering the entire U.S. By request, Drs. Stephenson and Nicholson used May and October 2021 input data to generate the baseline of relative Class I values.

Because the group of milk marketers collaborating on the project were local as opposed to global experts, we needed a process to synchronize and harmonize our thoughts. We created a spine of 19 strategically chosen anchor cities extending across the U.S. These anchor cities established the relative level from which regional subgroups could branch out and discuss increasing or

decreasing the USDSS-generated Class I values using knowledge of specific local challenges.

I want to make a small correction in this next statement. I talk about Miami, Orlando, and Atlanta as part of the 19 anchor cities. They were not officially part of those 19 cities, but we did talk about them. So I will read the statement now, now that I have the qualification there.

We assigned relative Class I values for the 19 anchor cities starting with Miami, Florida, then moving north to Orlando, Florida; Atlanta, Georgia; Asheville, North Carolina; and so forth. The Mideast Area was based off of values established for two anchor cities, Verona, Virginia, and Charleston, West Virginia. Furthermore, there is general agreement that the Class I differential in Western Michigan should be reasonably similar to the Class I differential established for Chicago, Illinois.

Using this framework, the Mideast Area subgroup developed its own anchor points focusing on the larger cities initially. We used Charleston, West Virginia, at $4.70 per hundredweight as the reference standard to preserve the relative pricing relationships with the Northeast and Southeast subgroups.

From Charleston, West Virginia, we established values at other significant milk processing cities by moving north to Sharpsville, Pennsylvania; moving west to Winchester, Kentucky; moving southwest to Nashville, Tennessee; moving west to Indianapolis, Indiana; and

moving far north to Grand Rapids, Michigan.

To begin the process of assigning values to the interior anchor points, we developed ten two-city pairings. As such, the process allowed the subgroup to discuss and to debate the relative value differences and the rationale for the differences. The objective was consistent in each of the pairings, that is to say, to determine what value difference was needed to encourage milk to move from milk supply areas located in the north and in the west of the Mideast Area to the areas of demand.

Relative Class I value differences were decided by an independent assessment of staff representing four NMPF milk cooperative -- cooperatives marketing milk in the Mideast Area, that would be DFA, Michigan Milk Producers Association, Foremost Farms USA, and Prairie Farms. After the individual assessments, differences were resolved by discussing specific milk marketing challenges faced as described below.

Before I talk about the pairings, I do want to impress upon you that the cities represent basing points for setting up pricing zones, and we are not necessarily moving milk between any of those two cities, although we could.

In the first pairing we looked at Chicago, Illinois, and Grand Rapids, Michigan, separated by a distance of 180 miles. There is ample milk production around Chicago and around Grand Rapids, and there are no

longer any fluid milk processing plants operating in the Chicago metropolitan area. All of the packaged product in the Chicago area is brought in from Grand Rapids, Michigan; Cedarburg, Wisconsin; Rockford, Illinois; or Dubuque, Iowa. To maintain Class I value continuity, the Class I differential in Chicago should be aligned with the prices at these other locations supplying packaged milk to Chicago. The recommendation was to set the Chicago Class I differential (Cook County) at $3.10 per hundredweight and the Grand Rapids Class I differential (Kent County) at $3.10 per hundredweight.

In the second pairing we looked at Grand Rapids, Michigan, and Marquette, Michigan, separated by a distance of 400 miles. Marquette has a small population and an adequate milk supply to cover the needs of Michigan's Upper Peninsula. Milk does not need to move far in the Upper Peninsula to get to the local Class I plant, and Upper Peninsula milk tends to stay local; it would not typically move south to other processing locations in Michigan. The recommendation is to set the Grand Rapids Class I differential (Kent County) at $3.10 per hundredweight and the Marquette Class I differential (Marquette County) at $2.80 per hundredweight. The relative difference of $0.30 per hundredweight places more value on the location further south, which is closer to a larger population center and closer to more processing plants.

In the third pairing we looked at Grand Rapids,

Michigan, and Elkhart, Indiana, separated by a distance of 100 miles. There's only a short distance separating the two locations, and milk production is ample around both cities. There is no need to encourage milk to move between the two locations; milk should have the same relative value at Grand Rapids and at Elkhart. The recommendation is to set the Grand Rapids Class I differential (Kent County) at $3.10 per hundredweight and the Elkhart Class I differential (Elkhart County) at $3.10 per hundredweight.

In the fourth pairing we looked at Elkhart, Indiana, and Indianapolis, Indiana, separated by a distance of 160 miles. Indianapolis is a large metropolitan area with a large population. There are several Class I plants in and around the Indianapolis metropolitan area. However, there is not much local milk near Indianapolis, so milk from supply locations to the north needs to be encouraged to move south toward Indianapolis. The recommendation is to set the Elkhart Class I differential (Elkhart County) at $3.10 per hundredweight and the Indianapolis Class I differential (Marion County) at $3.70 per hundredweight. The difference of $0.60 per hundredweight places more value on the location further south and east and located more distant from the milk supply.

In the fifth pairing we looked at Indianapolis, Indiana, and Columbus, Ohio, separated by a distance of 175 miles. Both cities have significant populations, but

neither city is close to a milk supply. Logistically, it is easier to move milk into Indianapolis from Northern Indiana than to get milk into Columbus. The natural flow of milk is from north to south and from west to east. However, milk still needs financial encouragement to move, especially west to east. The recommendation is to set the Indianapolis Class I differential (Marion County) at $3.70 per hundredweight and the Columbus Class I differential (Franklin County) at $4.00 per hundredweight. The difference of $0.30 per hundredweight places more value on locations further to the east.

In the sixth pairing we looked at Columbus, Ohio, and Cleveland, Ohio, separated by a distance of 150 miles. Logistically, it is relatively easy to get milk from Michigan into Cleveland via Interstate 90. The mileage is not insignificant, but they are relatively easy miles on interstate highways. The Cleveland Class I differential should be lower than Columbus and about the same as Indianapolis. The recommendation is to set the Columbus Class I differential (Franklin County) at $4.00 per hundredweight and the Cleveland Class I differential (Cuyahoga County) at $3.70 per hundredweight. The difference of $0.30 per hundredweight places more value on the location further south.

THE COURT: Just re-read that sentence for us, again.

THE WITNESS: The last sentence?

THE COURT: Yes.

THE WITNESS: The difference of $0.30 per hundredweight places more value on the location further south.

THE COURT: Thank you.

THE WITNESS: Okay.

In the seventh pairing, we looked at Columbus, Ohio, and Sharpsville, Pennsylvania, separated by a distance of 195 miles. Western Pennsylvania has a large cheese plant and a large Class I plant within 50 miles of each other with little local supply. Being a milk deficit area already and becoming more milk deficit each year, milk needs to move into the area from supply points located to the west. Milk needs financial encouragement to move to the Class I plant instead of moving to the local cheese plant.

Milk haulers are challenged by long distance hauls from the Mideast Area's supply locations and are reluctant to move milk from Michigan or from Northern Indiana that far to the east because of the strain on drivers, who are increasingly difficult to hire and to retain. There are also concerns about violating Department of Transportation driver hours of operation regulations.

The best opportunity to get milk to the east is to stairstep milk by pulling milk from Eastern Ohio and backfilling with milk from Western Ohio, Northern Indiana, or from Michigan. Eastern Ohio is already milk deficit because of the abundance of milk processing plants in the region. Both Columbus and Sharpsville have similar

challenges for milk movements. As such, their Class I differentials should be aligned. The recommendation is to set the Columbus Class I differential (Franklin County) at $4.00 per hundredweight and the Sharpsville Class I differential (Mercer County) at $4.00 per hundredweight.

In the eighth pairing we looked at Columbus, Ohio, and Cincinnati, Ohio, separated by a distance of 110 miles. There is not much milk in Southern Ohio or Southern Indiana. Milk does not move north out of Kentucky to Cincinnati because Kentucky is already milk deficit. To service customers consistently, milk must move from the northern part of the Mideast Area to the south. Both locations have similar challenges for milk movements. Once milk gets to Columbus, it is relatively easy to get the milk into Cincinnati on I-71. The recommendation is to set the Columbus Class I differential (Franklin County) at $4.00 per hundredweight and the Cincinnati Class I differential (Hamilton County) at $4.00 per hundredweight.

In the ninth pairing we looked at Cincinnati, Ohio, and Winchester, Kentucky, separated by a distance of 100 miles. There is not much local supply in Central Kentucky; it is a milk deficit state. Most of the local Kentucky milk is shipped to a large Class I plant in Winchester, Kentucky. However, there is not enough nearby milk to supply the plant's milk needs. Logistically, the distance and driver time are limiting factors to get milk to move that far south in the Mideast Area. Also, terrain

and road quality are not as conducive to hauling milk in Kentucky. There must be incentives in place to encourage milk to move out of Northern Indiana, Northwest Ohio, or Michigan, and into Kentucky. The recommendation is to set the Cincinnati Class I differential (Hamilton County) at $4.00 per hundredweight and the Winchester Class I differential (Clark County) at $4.60 per hundredweight. The difference of $0.60 per hundredweight places more value on the location further south.

In the tenth and final pairing, comparing Cincinnati, Ohio, and Charleston, West Virginia, separated by a distance of 210 miles. West Virginia is a milk deficit area that is getting more deficit as dairy farms exit the dairy business. To supply customers, milk must move from northern and western supply locations. Terrain and road quality are not as conducive to hauling milk in West Virginia. The best opportunity to get milk moved to the east is to stairstep milk by pulling milk from Eastern Ohio and backfilling with milk from Northwestern Ohio, Northern Indiana, or Michigan. The recommendation is to set the Cincinnati Class I differential (Hamilton County) at $4.00 per hundredweight and the Charleston Class I differential (Kanawha County) at $4.70 per hundredweight.

THE COURT: Would you read into the record the spelling of that county?

THE WITNESS: I think I have misspelled it, but I think it is K-N-N-A-W-H-A (sic). I think I put an extra "A" in there.

THE COURT: Say it again?
THE WITNESS: Kanawha.
THE COURT: And spell it again?
THE WITNESS: K-A-N-A-W-H-A.
THE COURT: Thank you.
THE WITNESS: I'm going to read that sentence again since I botched that piece of it.
The recommendation is to set the Cincinnati Class I differential (Hamilton County) at $4.00 per hundredweight and the Charleston Class I differential (Kanawha County) at $4.70 per hundredweight. The difference of $0.70 per hundredweight places more value on the location further east.
After the relative value differences among the ten two-city pairings were established, we expanded the analysis to include additional cities. The 29 cities selected represent locations of pool distributing plants and major milk processing plants categorized as Class I, Class II, Class III, or Class IV.
And if you could show the next slide, please.
Yes, thank you.
Chicago was included as a reference point among the 29 cities but is not a city located within the Mideast Area. Referencing Table 5, which is showed on the screen behind me, the lowest proposed Class I differential is $2.80 per hundredweight in Marquette County, Michigan, and the highest is found in Laurel County, Kentucky, at $4.85 per hundredweight.

On average, the National Milk Producers Federation Class I differentials proposed for the 29 cities are $1.65 per hundredweight higher than the current values. Qualitatively, Table 5 reveals the NMPF proposal recommends lower Class I differentials in Michigan than obtained from the USDSS model output.

THE COURT: I'm going to stop you there, Dr. Erba. This is wonderful, and very dense, and I want a five-minute stretch break. If you must leave the room, do, but we're just going to take a five-minute break. Please be back and ready to go at 10:10.

We go off record at 10:03.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record. We're back on record at 10:10.

Dr. Erba, I'm going to have you back up just a little bit to page 12 of Exhibit 336, and just read me the name of Table 5.

THE WITNESS: Yes, of course.

And if we could get that to show up on the screen, please. Great.

Table 5 is the "Comparison of current and proposed Class I differentials in 29 cities relevant to the Mideast Area."

THE COURT: All right. Thank you.

And then go over where you had been on page 13 and just start from the very top of page 13 for us.

THE WITNESS: Certainly.

On average, the NMPF Class I differentials proposed for the 29 cities are $1.65 per hundredweight higher than the current values. Qualitatively, Table 5 reveals that the NMPF proposal recommends lower Class I differentials in Michigan than obtained from the USDSS model output. We also see that Class I differentials grow increasingly larger when moving to the south and to the east, that is to say, higher Class I differentials are found in Ohio, Indiana, Central Kentucky, and Western Pennsylvania. In other words, the NMPF proposal provides a greater slope or additional financial incentives to encourage milk to move south and east out of the milk surplus regions located in Northern Indiana and in Michigan.

The Mideast Area shares touchpoints with the Midwest, Southeast, and Northeast regions, and some of the additional discussions with representatives from those regions were necessary to ensure the seams where the regions join were consistent.

Comparing notes with other cooperative representatives, we identified areas within the Mideast where consolidating two or more pricing zones made sense. For example, the original exercise left a small pocket of higher Class I differentials around Columbus, Ohio, which was later consolidated with an adjacent geographically larger zone that dovetailed well with the zones proposed for the Northeast region. Similarly, differences for counties along the seams were resolved through discussions

with staff representing the Northeast, Southeast, and Midwest Areas.

To finalize the Class I differentials proposed for the Mideast Area, some fine tuning was necessary after adjustments were made after consulting with cooperative staff representing surrounding regions. Because input and suggestions were taken from many sources and resulting compromises were made to develop an explainable and contiguous Class I differential surface, a final check seemed like a logical next step before concluding the process.

Pool plants reported for Federal Orders Number 33 and Number 5 in 2022 were plotted on a map of the proposed Class I differentials to determine if any inconsistencies persisted. A few such inconsistencies were identified, and I will detail the specifics of two of them. However, the process involved to resolve the pricing inconsistencies was the same for each instance encountered.

First, in Western Pennsylvania, there are several Class I plants around the Pittsburgh area. Some of them compete for business in that market, but not all were in the same pricing zone:

A Class I plant located in Mercer County was in the $4.00 per hundredweight zone; a Class I plant located in Butler County was in the $4.20 per hundredweight zone; a Class I plant located in Fayette County and two Class I plants located in Allegheny County were in the $4.40 per

hundredweight zone.

The solution was to move Allegheny County (where Pittsburgh is located) to the $4.20 per hundredweight zone because plants located in Allegheny County compete for Pittsburgh area business.

Now, I realize that I said this is a $4.20 per hundredweight zone, but the Excel spreadsheet we submitted still says $4.40. So that really should be $4.20.

THE COURT: The Excel spreadsheet should say $4.20?

THE WITNESS: Yes. It still says $4.40. That would be incorrect. It should say $4.20. That's Allegheny County, Pennsylvania.

MS. HANCOCK: Your Honor, just for our record, so it is clear, it is Exhibit 299 where we have the county noted. So when we make that correction, we'll need to make it in Exhibit 299.

THE COURT: Thank you. I've made my notes, and we'll deal with that correction, not now, but soon.

And you may, again, resume your testimony, but start again with the sentence that says, "The solution was to move Allegheny County."

THE WITNESS: Okay.

The solution was to move Allegheny County (where Pittsburgh is located) to the $4.20 per hundredweight zone because plants located in Allegheny County compete for Pittsburgh area business. The plant located in Mercer County is more distant from the Pittsburgh market and does

not compete directly with the other smaller independently owned Class I plants. The same sentiment applies to the plant located in Fayette County, as it is located further south of the Pittsburgh market.

The second case involves Class I plants in Southwest Ohio and in Eastern Indiana:

A Class I plant located in Clark County, Ohio was in the $4.00 per hundredweight zone; a multi-use plant located in Wayne County, Indiana, was in the $3.70 per hundredweight zone; a Class I plant located in Miami County, Ohio, was in the $3.70 per hundredweight zone; and a Class I plant located in Marion County, Indiana, was in the $3.70 per hundredweight zone.

Again, there are several plants within a relatively small geography that are all likely competing for the same business around Columbus, Dayton, and Cincinnati. The solution to equalize raw product costs was to move Clark County, Ohio, to the $3.70 per hundredweight zone.

And, again, I'm sorry, I have to make another correction. The -- that same spreadsheet still shows $4 per hundredweight. It should be $3.70 per hundredweight for Clark County, Ohio.

THE COURT: Excellent. We'll make that change when we make the previous one.

THE WITNESS: If I could -- oh, perfect, it is up.

Figure 1 shows the NMPF proposal for Class I differentials among the counties in the six states

comprising the Mideast Area. Compared to current Class I differentials (Figure 2), NMPF proposes higher Class I differentials in the Mideast Area as well as more zones or bands of differentials. The zones or bands tend to be oriented southwest to northeast, reflecting the increase in relative location value of milk when moving to the south and to the east. Figure 3 reveals the differences by county of the NMPF proposed Class I differentials and the current Class I differentials.

In addition to more pricing zones and higher values at each location, the NMPF proposal for the Mideast Area also adds more of a pricing slope by placing a higher value on the locations to the south and to the east than the current Class I differentials. The increased slope addresses the difficulties of moving milk from areas of surplus milk supplies, that is to say, Michigan, Northern Indiana, and Northwestern Ohio, to the milk deficit areas located to the south and to the east.

The NMPF proposal for Class I differentials in the Mideast Area is mostly in line with the results obtained from the USDSS. There are 406 counties contained in Federal Order 33 and in the north central portion of Federal Order Number 5 (that is to say, Central Kentucky and Southern Indiana).

In the NMPF proposal for the Mideast Area, just 18 counties (4%) are more than $0.25 per hundredweight higher than what is suggested by the USDSS. Those counties are found in Central West Virginia, Southeast Ohio, and

Central Kentucky. The largest upside departure from the USDSS results is found in Central Kentucky at a plus $0.40 per hundredweight.

Conversely, there are 97 counties (24%) that are more than $0.25 per hundredweight lower than the USDSS results. These are found primarily in Northern Michigan, Northern Indiana, and Northern Ohio. The largest downside departure from the USDSS results is found in Northern Michigan at minus $0.70 per hundredweight. Across the entire Mideast Area, the NMPF proposal averages -- here's another mistake -- minus $0.10 per hundredweight compared to the USDSS output.

So that minus sign is missing off that $0.10 per hundredweight.

THE COURT: And let's make that change right now. We are in Exhibit 336, page 17. We are going to the last line that comes before the heading "Justifying the Base Price for Class I Differentials."

So in that line, Dr. Erba, what do we change?

THE WITNESS: The -- there's a minus sign missing in front of the $0.10 per hundredweight. So the sentence should read: "Across the entire Mideast Area, the NMPF proposal averages minus $0.10 per hundredweight compared to the USDSS output."

THE COURT: We have made that change. Thank you.

THE WITNESS: Correct. Fantastic.

During Federal Order Reform, USDA cited nine performance criteria to evaluate Class I pricing options

(See Federal Register, Vol. 54, No. 63/Friday, April 2nd, 1999; pages 16109 to 16112). The nine criteria were based upon regulatory objectives and requirements of the Agricultural Marketing Agreement Act of 1937. One of the criteria cited by USDA was to recognize the quality value of milk, as Grade A milk is required for fluid use. USDA further noted that dairy farms incur costs of obtaining and maintaining Grade A licenses and those costs need to be reflected in Class I prices. At the time of statement, USDA determined that the appropriate minimum value for Class I differentials should be $1.60 per hundredweight.

"Option 1A recognizes the quality value (Grade A) of milk through the addition of a differential that begins at $1.60 per hundredweight in the base zone. The $1.60 per hundredweight differential level is used because it would ensure a sufficient supply of milk for fluid uses in the most surplus regions."

Similarly, in the Proposed Rules published during Federal Order Reform, USDA described the costs considered in the build-up to the $1.60 per hundredweight base Class I differential (See Federal Register, Vol. 63, No. 20/Friday, January 30th, 1998; pages 4907 to 4909).

In summary, $0.40 per hundredweight was established for the maintenance cost associated with Grade A license for a dairy farm, $0.60 per hundredweight was established for the cost of balancing for Class I plants, and $0.60 per hundredweight was established for the incentives to encourage deliveries to Class I plants

for a total of $1.60 per hundredweight.

While USDA recognized there was a cost associated with the conversion from a Grade B dairy to a Grade A dairy, those conversion costs were not considered; only the costs of the dairy maintaining its Grade A license was considered.

USDA stated, "…a portion of the Class I differential must reflect the value associated with maintaining Grade A milk supplies since this is the only milk available for fluid use. Originally, the differential needed to be established at a level that would encourage conversion from Grade B to Grade A status. With approximately 96% of all milk already converted to Grade A, this value now needs to reflect the cost of maintaining Grade A milk supplies."

USDA further stated that it is difficult to quantify the cost of maintaining the Grade A status on a dairy farm, although USDA did cite a number of requirements that would need to be met, including an approved water system, specific facility construction and plumbing requirements, specific equipment, and appearance of facility.

Perhaps a reason USDA had difficulty specifying a dairy farm's maintenance cost is that the detailed list of costs encountered while converting from Grade B to Grade A was omitted, and some of those conversion costs would be ongoing costs that could be used to estimate a maintenance cost. For this reason, I want to revisit the issue of

cost of converting a Grade B dairy to a Grade A.

This analysis tracks the increased sanitary requirements for a Grade A dairy facility as imposed by state health departments and the Food and Drug Administration's Grade A Pasteurized Milk Ordinance (PMO) and estimates a cost of compliance to convert the facility from Grade B to Grade A. The PMO sets forth the specific requirements that must be met to attain a Grade A license for dairy farms (PMO – Items 1r through 19r).

Generally speaking, the infrastructure for a Grade A facility, especially the milk room, milking parlor, vestibules, storage rooms, and so forth, must be maintained at a higher sanitary standard. The Grade A facility should provide a clean, well-lit, well-ventilated environment in good repair.

I'm going to skip the next section which simply describes the qualitative requirements for a Grade A dairy and start at the bottom of page 20, which uses an example, and I'll use this example throughout, of the cost converting from Grade B to Grade A.

Starting at the bottom of page 20.

To put the cost of conversion from a Grade B facility to a Grade A facility, I will use an example dairy of representative size. Grade B dairies tend to be smaller, so for this example, I will assume a 100-cow dairy farm, producing an average of 70 pounds of milk per cow per day. A dairy of that size with the specified daily production would produce 2.55 million pounds of milk

per year.

I will describe each of the required improvements and estimate an associated cost of compliance. Costs of compliance were estimated using input from cooperative field representatives in the Mideast Area, a 2009 document published by the Oregon Department of Revenue on cost factors for farm buildings (Exhibit NMPF-38A), and a 2015 University of Wisconsin Extension publication summarizing the costs involved with modernizing a dairy farm (Exhibit NMPF-38B).

Item 1: Remodel or build milk house and milking parlor. The estimated cost is $250,000 for a simple structure meeting PMO requirements for impervious surfaces, lighting, air circulation, and animal distribution and so forth. This would include a double-four herringbone parlor arrangement, figure that it has a 20-year depreciation, and a 10% salvage value, which works out to $0.44 per hundredweight for this size farm.

Item 2: Install a toilet facility. Estimate $15,000 for the groundwork, plumbing, supplies, and labor, 20-year depreciation. Works out to $0.03 per hundredweight for this size farm.

Item 3: Construct a liquid and solid waste holding structure (lagoon), with a clay liner. Estimate $100,000 in design permitting and construction costs, a 20-year depreciation. Works out to $0.20 per hundredweight for this size farm.

Item 4: Develop a Grade A water supply. Estimate

$25,000 for permitting, drilling, grading land, construction around the well head, and water testing. 20-year depreciation, which works out to $0.05 per hundredweight for this size farm.

Item 5: Acquire and install and plumb a stainless steel 2,000-gallon bulk milk tank, estimated price of purchase is $35,000, with a 20-year depreciation and a 25% salvage value. This works out to $0.05 per hundredweight for this size farm.

Item 6: Construct a cow yard and cow housing area, fully equipped, free stall barn with fans, waterers, scrape alleys, and so forth. Estimate $300,000 to design, permit, and construct a 100-cow stall barn at $300 per stall, 20-year depreciation and a 10% salvage value. It works out to $0.53 per hundredweight for this size farm.

MR. HILL: Dr. Erba?

THE WITNESS: Yes.

MR. HILL: Can you slow down just a bit with these numbers so the court reporter can capture them?

THE WITNESS: Absolutely.

Item 7: Cost of interest on construction/facility remodel loan. Loan amount of $725,000 for the milk house, parlor, cow yard, cow housing area, lagoon, water supply, bulk tank, and toilet. Figure a 6% interest rate, 20-year repayment period, $26,080 per year, which works out to $1.02 per hundredweight for this size farm.

Item 8: Regulatory inspections to ensure Grade A standards are being met. The farm is responsible for

paying the Market Administrator's fee, which is $0.05 per hundredweight for this size farm.

Item 9: Increase electricity usage for --

THE COURT: Dr. Erba, I just want to make sure that's clear. $0.05 per hundredweight is not just for the Market Administrator fees, it's all the things in this category, correct?

THE WITNESS: It's for the inspections that have to be performed to make sure you maintain Grade A status.

THE COURT: So it is just that?

THE WITNESS: Yes.

THE COURT: Understood. Thank you.

THE WITNESS: Yes.

Item 9: Increased electricity usage for fans, bulk tank refrigeration, manure pumps for lagoon. Estimate $0.15 per hundredweight for this size farm.

Item 10: Increase in transportation costs. Increase pickups from every three days to every other day to be Grade A compliant. This assumes a $25 stop charge. Increase the frequency of pickups by 50%. For this size farm, increase from ten pickups per month to 15 pickups per month. That's $125 increase per month. That works out to $0.06 per hundredweight for this size farm.

Item 11: Increased chemical usage and more frequent rubber part replacement to maintain Grade A milk quality standards. More frequent system and facility washings and cleanings; higher quality soap, acid, sanitizer, and teat dip; more frequent replacement of all

rubber gaskets, hoses, and inflations. Figure $0.25 per hundredweight for chemicals and $0.10 per hundredweight for rubber part replacement.

So the total cost conversion from Grade B dairy to a Grade A dairy farm is $2.93 per hundredweight.

Related to the analysis of determining the cost of converting a Grade B dairy farm to a Grade A dairy farm is the cost of maintaining a Grade A license. In other words, after a dairy is remodeled to meet the PMO requirements for a Grade A facility, what does it cost to maintain the Grade A license?

It is fair to say that all the variable costs cited in the analysis would continue to apply. These would include paying for inspections ($0.05 per hundredweight), increased electricity usage ($0.15 per hundredweight), increased frequency of hauling ($0.06 per hundredweight), increased chemical usage for sanitation ($0.25 per hundredweight), and increased frequency of replacing rubber parts ($0.10 per hundredweight).

In addition, the maintenance cost of the physical assets necessary for the dairy farm to meet the Grade A standards should be included. Estimated maintenance costs for physical assets such as barns and other farm structures range between 2% and 5% of replacement cost.

Using construction costs as a proxy for replacement costs and using 3% as the maintenance cost, the cost to maintain the physical structures cited in the cost of conversion analysis amounts to $21,750 per year,

or $0.85 per hundredweight. As such, the estimated ongoing cost of maintaining a Grade A license is $1.46 per hundredweight. This does not include the non-cash expense of depreciation, which represents about $1.30 per hundredweight.

For more than 20 years, Class I differentials in the Mideast Area have been unchanged. During that time, Michigan has emerged as a leading reserve supply for the Mideast Area, and at times, Michigan has also been the reserve supply for states in the southeastern U.S. At the same time that Michigan's milk production capacity has been evolving, traditional milk supply points within the Mideast Area, such as Eastern Ohio, Southern Ohio, Western Pennsylvania, and Central Kentucky, have been losing and continue to lose milk production capacity as a result of dairy farms exiting the business.

The U.S. dairy industry has been built around the ability to haul milk when and where it is needed, and the Mideast Area has followed that same pattern. Milk must move from the north to the south, and from the west to the east to meet customer raw milk needs. As milk hauling costs have increased for a variety of reasons, the need for greater financial incentives to encourage milk to move to Class I plants has also increased. Current supply and demand conditions in the Mideast Area and in surrounding areas justify updates to the current Class I differentials.

DFA expresses its appreciation to the Secretary of

Agriculture and the Dairy Division for holding this hearing to consider these important proposals. We encourage the Secretary to recommend the adoption of Proposal 19, update Class I differentials throughout the U.S.

MS. HANCOCK: Thank you, Dr. Erba.

Your Honor, at this time we would make him available for cross-examination.

THE COURT: All right. Good. Please be back and ready to go at 10:50. We go off record at 10:39.

(Whereupon, a break was taken.)

THE COURT: Let's good back on record.

We're back on record at 10:51.

MR. ENGLISH: Good morning, Your Honor.

CROSS-EXAMINATION

BY MR. ENGLISH:

Q. And good morning, Dr. Erba.

A. Good morning.

Q. My name is Chip English representing the Milk Innovation Group.

So I want to start with a couple of questions particularly because, from your own background, I think that you can agree with me that you have specific long history with California, correct?

A. I do have a long history with California.

Q. So speaking about the California state order as opposed to the California Federal Order for a moment, in your experience under the California state order, which

ceased on November 1st, 2018, did dairy farmers have the option to elect Grade B status for an annual basis?

A. Yes.

Q. And in your experience, did they do so?

A. Yes. Some did.

Q. Yeah. Can't quantify it necessarily, but some did, correct?

A. Yes.

Q. And that was an economic decision on their part to elect Grade B status, correct?

A. Yes.

Q. And it was effectively really on paper. It wasn't that they were giving up, because they might want to become Grade A the next year, correct?

A. It was on paper they gave up their Grade A license, and when they came back in, whenever that was, might be a year, might be two, they had to meet the standards that were applicable at that time. So I'm not sure that we're -- not sure I'm following you exactly, but I think that's --

Q. I think that's following.

A. Okay.

Q. I don't think we're disagreeing.

A. Okay.

Q. Now, by the time there was a Federal Order in California, you had left CDI; is that correct?

A. That is correct.

Q. Nonetheless, given your experience in California,

do you know whether dairy farmers have at least until the end of last year been electing Grade B status for economic reasons under the Federal Order?

A. I was unaware that they still had that option.

Q. Well, not so much the option as if they effectively did the same thing, which was go Grade B on paper, they would then not be -- have producer milk under the Federal Order, correct?

A. I don't know. I -- when I left California, I did not pay any attention to what was happening with that provision.

Q. I don't blame you.

But you do know that -- you were involved in the hearing that led to the California Federal Order, correct?

A. Yes, I was.

Q. And you are aware that as a result of that proceeding, when the Federal Order was adopted, the United States Department of Agriculture, through a section authorized by the 1996 Farm Bill, permitted California to continue to operate the quota system, correct?

A. Yes.

Q. And that operation of that quota system would have created some of the same economic opportunities for somebody to say, I don't want to pay in the quota system, therefore I'm going to elect Grade B?

A. And that's the part that I didn't follow after I left California.

Q. Thank you, sir.

MR. ENGLISH: So for the next section it would help if the witness could have Exhibits 53 and 58. And probably Her Honor as well.

THE COURT: If you have an extra, I will borrow from you. It was given to my predecessor, but I shipped it to Washington DC.

MR. ENGLISH: I wish I could do that with all my documents.

So for everybody's information, Exhibit 53 is Producer Milk by County, December 2000, and Exhibit 58 is Producer Milk by County, December 2022.

THE WITNESS: Shall I assume I will get a copy at some point?

MR. ENGLISH: That's my hope.

THE COURT: Dr. Erba, you are being handed a record copy, which means you must be sure to give it back.

THE WITNESS: I will be sure to give it back. Thank you.

THE COURT: And I will do likewise.

MR. ENGLISH: I will do my part to help make that happen, Your Honor.

THE COURT: Very good.

BY MR. ENGLISH:

Q. So a couple of predicate questions. For a complete picture of milk production in the geographical territory that's the Mideast market, you would need to account not only for the milk that is producer milk on Order 33, but also milk that is producer milk on other

orders, correct?

A. Correct.

Q. And fortunately, having just handed you Exhibits 53 and 58, we have that information. So I'm not going to try to belabor the specific numbers if I can, but I would like to look at a few data points.

If you look first at December 2000, which is Exhibit 53, and if you'll look at page 3 of 11, which is Order 5, you would agree that you see milk pooled on Order 5, that is produced in Michigan, Indiana, Ohio, and at least part of Pennsylvania that is part of Order 33, correct?

A. Yes.

Q. And similarly, if you look at Order 1 -- I have this backwards, I'm sorry -- if you look at Order 1, which is page 2, you will see milk in Western Pennsylvania that is part of Order 33 that is pooled on Order 1, correct?

A. Yes.

Q. And now turning to Exhibit 58, there is some small quantity of milk listed here on page 2 in 2022 that would be pooled on Order 1, correct?

A. Where are you seeing that?

Q. Well, okay. So, first of all, let's break it into two parts. On page 2 there is still, for Order 1, a couple of counties in the Order 33 area that are pooled on Order 1, correct?

A. Yes.

Q. But the overall volume, overall pounds of milk in

Pennsylvania includes both Order 1, unregulated territory, and Order 33, correct?

A. If I could have you repeat that, please.

Q. Okay. I'm just trying to -- I'm not trying to overstate how much is in -- from Western Pennsylvania, so I want to be clear. For the 640,532,000 pounds of milk from Pennsylvania that are pooled on Order 1, that includes not only those western counties in Pennsylvania, Order 33, but it includes territory that is Order 1 and also territory that is called unregulated, correct?

A. Yes.

Q. Okay. And if we look at Order 5, we see, again, milk from Michigan, Indiana, Ohio, and, again, a small portion of Western Pennsylvania that is Order 33, that is pooled on Order 5 in December of 2022, correct?

A. Yes.

Q. And, in fact, looking just quickly, Indiana -- admittedly, some of Indiana is also in Order 5, but Indiana represented 10% of the milk pooled on Order 5 in December of 2022, correct?

A. Yes, approximately 10%.

Q. And Ohio represented approximately 5%, correct?

A. Correct.

Q. And if you look at Order 7, again, there is milk in Indiana for December of 2022 that is physically located and produced in the Mideast Area -- Mideast Marketing Area that is, in fact, pooled on Order 7, correct?

A. Yes.

Q. And there's some from Michigan, but we don't know how much because it's restricted. But Indiana, again, represents more than 10% of the milk that is being pooled under Order 7 from Order 33, correct?

A. Yes.

Q. And if we turn to Order 30, while small volumes, nonetheless there's volumes of milk from Indiana and Michigan and some unquantifiable number for Ohio that is pooled on Order 30 from Order 33 marketing area, correct?

A. Yes.

Q. And finally for Order 32, there's some very small amount of milk from Indiana that is pooled on Order 32, correct?

A. Yes.

Q. So, in fact, when we look at pages 2 and 3 of your testimony, that is milk pooled on Order 33, whether or not that milk was produced in the marketing area, correct?

A. I believe that's correct.

Q. And it doesn't include any of that milk that we just looked at in Exhibit 58 that is being pooled on Orders 1, 5, 7, 30, and 32, correct?

A. That's correct.

Q. I'll keep my promise now. I'm done with those exhibits. And if I may approach the witness?

THE COURT: You may.

MR. ENGLISH: And, Your Honor, I will get the copies and return them to USDA.

///

BY MR. ENGLISH:

Q. So I want to turn now to some of your statements, issues, and in particular, I want to start discussing Dairy Farmers of America.

And the sentence at the end of the first paragraph, "As of June 2023, DFA's Mideast Area had 828 member farms located in the six aforementioned states, producing about 20 million pounds of milk per day."

And so recalling what we just discussed -- and I admit I was confused, so this is on my part -- are those 828 member farms all the farms that DFA has that are physically located in the marketing area regardless of where the milk is pooled?

A. Yes. Yes.

Q. Do you know how many of those 828 member farms located in the Mideast Area itself are actually pooled on Order 33?

A. I do not know that. The majority of them.

Q. How about the 20 million pounds of milk per day, how much of the milk that are -- that is physically produced by DFA members in the marketing area is actually pooled on Order 33?

A. I do not know that number.

Q. Okay. Thank you. So thank you for correcting what I considered to be a typo about the cheese plant being in Western versus Eastern Pennsylvania. I confess I puzzled over that.

Who owns that plant?

A. Who owns that plant?
Q. In Western Pennsylvania. Now that we have corrected the plant in Western Pennsylvania as a large cheese plant, who owns that plant?
A. That's a DFA plant.
Q. And what is the supply for that plant in terms of geographic region?
A. You mean how large is the footprint?
Q. No. How far away does the milk come?
A. Right. So --
Q. Does it come from far away as Michigan?
A. It can, yes.
Q. Can, but does it?
A. Yes.
Q. Does it come from Indiana?
A. I would say not as a regular supply. But, yes.
Q. Going back to Michigan, would it go as a regular supply from Michigan?
A. Yes.
Q. Does that plant operate as a traditional balancing plant or is it running at full capacity?
A. That plant would run at full capacity.
Q. Is it true that that plant does not accept milk as a balancing facility for Order 33 Class I plants?
A. I'm not sure what you mean by that.
Q. Well, you have just said that it is running at full capacity. If so, does it have the ability to accept surplus milk from milk being diverted from Class I plants

in Order 33?

A. I would say that would not be a usual practice. I won't say it never happens, but it's not a usual practice.

Q. And is it ever a practice to accept milk diverted by Class I proprietary handlers as opposed to co-op?

A. I would say probably even less frequent.

Q. So I'm hoping to have a shorter conversation with you than I did with Mr. Sims, about the question of the $1.60 and the $2.20.

A. Okay.

Q. I say that because on page 18 of your testimony, you quote from USDA Federal Order reform, and you say that "Option 1A recognizes the quality Grade A of milk through the addition of a differential that begins at $1.60 per hundredweight in the base zone."

You acknowledge there's a base zone of $1.60, at least in Federal Order reform, correct?

A. In the Federal Order reform, yes.

Q. Is there a base zone as that term is used by USDA in Federal Order reform at $2.20 in National Milk's proposal?

A. I would say no, we did not approach it the same way.

Q. Is it fair to say that in Federal Order reform that USDA had the $1.60 base zone, they then had a price surface that was added to the $1.60 base zone, and then there were red pencil adjustments made? Is that a fair characterization of what USDA did in your view?

A. That would be my understanding, yes.
Q. National Milk Producers Federation went back to the source of the USDSS, United States Dairy --
A. Sector Simulator.
Q. I keep forgetting sector, Sector Simulator.
And National Milk had that run using the same $1.60 from Federal Order reform, correct?
A. Yes. We had a -- that was by request from the task force, National Milk Producers Federation task force, to have essentially a price wedge of $1.60 per hundredweight that was applied.
Q. And now you said you approached it differently.
There's a $2.20 minimum as I understand it from Mr. Sims?
A. Yes.
Q. And that means that in some areas $0.60 was not added in the same way it was added by -- in terms of the $1.60 by USDA in Federal Order reform, correct?
A. I think that is a fair characterization.
Q. What is the philosophical justification for National Milk to use a different mechanism than USDA used in Federal Order reform?
A. Our initial approach was the same. Everybody started with the USDSS results at $1.60 per hundredweight added in, as we requested. Mr. Sims spoke to the four groups that split up and went their separate ways to work on each geographic region. Most of them came back and said, we can make this work with no adjustments with the

$1.60.

At least one area, maybe more, I don't recall off the top of my head, came back and said, we can't make these add up. The price alignment doesn't work if we leave it at $1.60. We need some movement.

And so those sections of the country that had that issue worked together to come up with a minimum price that would be elevated above the $1.60, and that's where the $2.20 came in. But that $2.20 was not applied universally, only in the areas that were having price alignment issues.

Q. Was it price alignment issues or was it areas where the model showed that the values were negative or close to zero?

A. My understanding is it's price alignment issues. But the folks that are following me that were in those areas can speak to that directly. We did not have that issue in the Mideast, and that's where I worked.

Q. I really want to thank you for your candor. Thank you.

You talk about the widening distance between the plants and the farms that supply them.

Is it true that farms supplies for milk are increasingly distant from the populations that consume the ultimate dairy products?

A. I think that's probably an accurate statement, yes. They are trying to expand. Expansion requires more land. And they are trying to go to areas where they can

acquire land to expand their farms. So that typically means you are headed away from cities, not toward them.

Q. And when building a plant, a processor can weigh the trade-off of either building a plant next to the farm supply or next to the population it tends to serve, correct?

A. They absolutely do make that evaluation.

Q. Do you know whether new plants are actually being built that are farther away from the farm supply as opposed to closer to the farm supply?

A. Yes.

Q. Which plants in the Mideast region that have been opened are farther from the milk supply?

A. I spoke to two plants, both Class I plants, that are closer to the population centers. One is in Tipp City, Ohio, and one is in Northeast Indiana, near Fort Wayne. Those are closer to the population and further from the milk supply.

Q. Do you agree that the USDSS model takes into account the cost of hauling milk from production to where it's needed?

A. I would hope so. That was my contribution 25 years ago.

Q. And also the cost of getting that finished fluid product to the market, correct?

A. Fluid and other products as well, yes.

Q. And neither the USDSS nor the Federal Market Orders have any policy or decision about who bears those

transportation costs, correct?

A. That is correct.

Q. Because it is up to the supplier and processor to negotiate how they will account for those hauling costs?

A. In the model?

Q. Outside the model?

A. I was thinking about something differently when you asked that question, so I'll have to ask you to ask that again.

Q. So my predicate question that you agreed with, I believe, was that neither the USDSS nor the Federal Marketing Orders have any policy or decision about who bears those transportation occasions, and I think you agreed with that statement.

A. Maybe I should qualify that. Minimum prices apply at point of delivery, not point of production. So there is a cost, there is an expectation that the product will be delivered to that point of sale.

Q. FOB plant?

A. FOB plant, correct.

Q. And the USDSS model, again, takes that into consideration in terms of figuring out the spatial values, correct?

A. It doesn't care who bears that cost. It just knows there is a cost.

Q. Thank you.

And so my follow-up question was that since the model doesn't care, but nonetheless tells us where those

costs are, suppliers and processors are free to account for that hauling cost maybe not being FOB plant, correct?

A. There is some of that negotiation that happens. And it is a negotiation. But the minimum prices do apply, as you said, FOB plant, and the negotiation starts there.

Q. And, in fact, there are supply agreements, especially recently, that have provisions for fuel charges, correct?

A. Yes. And we would have some of those in the Mideast Area as well. They are not universal.

Q. So, again, maybe we can have a shorter conversation than I had with Mr. Sims.

You have mentioned labor costs going up, fuel costs going up, equipment costs going up, correct?

A. I suppose I didn't actually mention that. It is in my written testimony, but I didn't actually say those things. But, yes.

Q. Well, you understand that I have poured over your testimony with great interest.

A. I am delighted about that.

Q. No one bought that.

A. I did. I believed you.

Q. You would agree, again, partly because of your involvement, that the USDSS accounts for labor costs, correct?

A. I'm sorry. Somebody coughed and I didn't hear your operative word there. Say it again, please?

Q. That the USDSS accounts for labor costs, correct?

A. What sort of labor costs?
Q. The labor costs that you testified in your written testimony have gone up.
A. The transportation?
Q. Whatever labor costs you included. It was just --
A. Yes.
Q. -- transportation?
A. Yes.
Q. Okay. And the costs of fuel are included in that model as well?
A. Yes. The more recent versions of it, I'm not exactly sure what is used for transportation. But as it is an iterative process, I imagine that the same labor factors and fuel factors that were there 25 years ago are still there, but probably better and improved. But I do not know what's in it today.
Q. Were you here for Dr. Nicholson's testimony last week?
A. I was.
Q. Did you hear him say that sometime around 2010 or 2011 they had created I believe a separate hauling cost model?
A. Yes. That seems to spell the demise of my contribution. Yes.
Q. Well, it probably grew out of it. It wouldn't exist but for you.
A. Yes.
Q. How about that?

And includes the cost of equipment, correct?

A. I'm not sure about that one. He would be the expert on that. I don't know.

Q. Did National Milk ask Dr. Nicholson what was or what was not in the model?

A. As far as transportation costs?

Q. Yes.

A. I don't think so. I just might -- I have this in my testimony. I did not read it.

The National Milk Federal Order task force was already well underway when I was asked to participate. So there will be some things -- in fact, I was not around participating when the task force asked Drs. Nicholson and Stephenson to do that work. About the time I showed up was just after that first model run had come. So I don't know exactly what was asked for.

Q. Based upon your own work for your dissertation, and your knowledge that it's an iterative process, do you have any reason to believe that the USDSS model is incomplete in any material way?

A. Well, there's always improvements that can be made, but I would say it is as good a representative of what it's supposed to be as what it can be. For a transshipment model that is as detailed, with as much input data as it has, it's fairly remarkable, and there aren't any counterparts to that. So I think improvements can be made, but a lot of that depends on the computing power and these days founding somebody who wants to work

on it.

Q. So as I have read your testimony and listened to it today, are there any of the modifications that you made in the Mideast Area, made to correct or to improve on the USDSS model?

A. Yes, I think so. Dr. Nicholson said it. I know I've talked to Mark about this several times, Dr. Stephenson. And it was certainly evident when I did my dissertation work on it. It's a starting point where it gives you some decent guidelines to say, what else might we think about? If you wanted to look at a blank map of the U.S. that said, fill in the Class I differentials, and you had nothing to guide you, you might have some real trouble doing that. And the USDSS gives you, I think, initially, a really nice framework, nice foundation that you can build on.

And a lot of what we did with the task force is exactly what I'm talking about. Said, this is the starting point, but this is not necessarily complete because the model cannot account for anything, it does not account for everything. And even Chuck and Mark would tell you the same thing, that there is a fair amount of I would say art -- that's been used before, I think that's an appropriate term -- to go in and colorize this framework and say, I think that's close, but it is maybe not exact, and we can get a little bit more precise by adding the information that we know specifically occurs in that market.

Q. So let me back up for a moment.

On page 6 of your testimony, you say that "current Class I pricing zones in the Mideast Area are too large geographically and do not reflect today's costs of moving bulk milk."

Do you agree that the USDSS model attempts to account for that?

A. I think it attempts to account for that, yes. It's certainly an improvement over what the current Class I differentials are that were set up 25 years ago or 23 years ago.

Q. And then you go on to say in the same page, "When attempting to move milk to satisfy Class I customer order requirements, Class I differentials are the main regulatory tool available to incentivize milk movements."

Correct?

A. Yes.

Q. So except for your discussion of the base price, would you agree that Class I differentials are not intended to cover production costs but rather to be a relational and geographical tool to move milk between locations?

A. I think that's a fair working definition of what they are.

Q. And am I correct that in making your modifications in the Mideast, you did not believe it was necessary to add $0.60 to the base differential?

A. We did not add $0.60. We used the $1.60 as the

base, used the model output, the USDSS model output, and using that framework we were able to come up with what I think is the sensible and explainable surface for the Mideast Area.

Q. Thank you.

Going back to the hauling testimony on pages 4 to 6 of your testimony. I would ask a couple of questions that I asked last week when Mr. Zalar was here.

You have included data for 2023 costs in your testimony. But as I understand it from last week's testimony from National Milk, that in order to keep the results consistent with the model that was for May and October of 2021, that you are not actually relying on 2023 costs at this point; is that correct?

A. The point of these two tables that I included, that Mr. Zalar spoke to specifically and I did not, was to merely show the increase in hauling costs as experienced from as far back as we could go that we had known reliable data to current. So these weren't anything more than just to show how much costs have gone up, which is quite a surprise when you look at some of the numbers that are included here, it could go up that much in a relatively short period of time. But these were not tied to the model at all.

Q. Or the proposal?

A. To the model.

Q. Well, it's -- is the fact that -- is the 2023 data that you have testified to -- or Mr. Zalar testified to

and you talked about very briefly, is it -- is the fact that that data is 2023 versus 2021 used in any way in the modifications that the Mideast working group made to come up with the proposal for your area?

A. So in a sense I would say the answer is yes, because as I spoke to the ten two-city pairings, we talked about what it actually costs to get milk to move from certain areas. And those -- we rely on those value judgments and opinions and thoughts were based on what it currently costs to move milk. So it would be more apt to say those are current costs, not 2021.

Q. Do you know if that was a consistent principle across the different working groups?

A. I do not know that. I -- actually the working groups worked to some degree in isolation when we had to. It was difficult to get that many people together. And when we had our region-by-region discussions, we started comparing numbers along those seams. We didn't necessarily talk about details and how we got there. So I don't know exactly what the other areas did, although I suspect that they did something pretty similar to what we did.

Q. So when you did look at these pairs and in 2023 costs, did you cover 100% of the costs while looking at that?

A. I -- I wouldn't say that that way. It was more of a question of what do we think it takes -- what kind of a price difference do we think it takes to get milk to move

that -- from one location to the next? And it wasn't a matter of saying, we want to cover 100% of the cost or any percent of the cost. It was, what do we think it takes to get that milk to move?

Q. Do you know whether USDA in its thinking has considered using some percentage less than 100%?

A. I don't know that. I suspect that they probably would.

Q. I'm pretty sure you were in California at the time. But you are aware there was a hearing -- the only changes in the Class I price surface since Federal Order reform was in the Southeast, correct?

A. Yes.

Q. Would you accept my representation that in that proceeding, DCMA, which was the cooperative, and USDA in accepting the proposal, applied an 80% hauling cost difference?

A. I will accept that. That would be, I think, consistent with what we did in California at the time with similar transportation issues.

Q. Did you apply an 80% calculation to the pairings that you discussed in this testimony?

A. Not specifically.

Q. Generally?

A. Well, again, it wasn't -- the discussion was, what do we think it takes to make milk move? So that number may be higher or lower depending on what day, what week, what month, what season. It was more of a general

assessment of, we think we need, for example, an additional $0.30 for that milk to move this direction. Now, nobody said, and that will cover 80% of the cost, or 100% of the cost. It was, we think that's the number we need to have milk move regularly.

Q. Now, you said a few moments ago that you got involved in the process some time after it started.

Were you involved at the time that National Milk created a spine of 19 strategically chosen anchor cities extending across the United States?

A. It sounds like you read something right out of my testimony. Yes, I was involved. That was my first meeting.

Q. Do you know whether that was an approach used in the past, either in Federal Order reform or in the Southeast proceeding?

A. I don't know that it was used ever before. I thought it was a very innovative way to get a lot of people who are local experts on the same page. I thought it was a -- a wonderful idea to get it started. And I supported it 100%.

Q. I think I know the answer based upon something you said a few minutes ago. But did National Milk provide -- establish any written parameters of how participants in the various regional meetings were to determine which criteria to apply to specific local challenges, or was that left to those individual groups?

A. I think there was encouragement. It would have

been via e-mail, not a specific form, a document, to say, this is how we expect that everyone's going to approach this, take these things into consideration. It was a brief list.

Q. Can you give us any context or specific information as to how the 19 -- and maybe that should be 18 -- anchor cities were selected?

A. As that was my very first meeting, I was mostly all ears. I did very little speaking. And it was a discussion about, as Mr. Sims described, what are the cities that are either close to one or more territories, or in some cases cities that we knew maybe needed a closer look, that had been problematic in the past. But I think he described it aptly what we did and how we did it, as far as picking out those 19 cities.

Q. Did the larger group, before breaking up into the smaller groups, make a determination as to what values to assign for the proposal to the anchor cities?

A. Yes. So we picked out the anchor cities. That was the point, to say, these are values associated with these 19 cities. And they were interpreted to be flexible, but you might have to work kind of hard to get somebody to change their point of view, because everybody was trying to use those same numbers.

So, for example, in Charleston, West Virginia, with the $4.70 differential, that was the one that was given to us that day, and I believe it remains the same -- remained the same in the proposal. But the idea was,

assign numbers that are relatively fixed, could possibly change if you had to, but those are the ones you are going to base everything that -- we'd go into the subgroups and have your discussions, those are the ones that you are going to be -- those are going to be the reference standards. Those are the ones you are always going to keep an eye on.

Q. When you said they were "given," was that somebody provided them to the group or the group discussed?

A. I think for the most part they came out of USDSS. I cannot swear to that, but I'm pretty sure that's where -- if they didn't, if they weren't exactly that, they were very close to that.

Q. Well, now, I agree Charleston, West Virginia, was. So maybe we should get Exhibit 323.

THE COURT: Which one?

MR. ENGLISH: Exhibit 323, if we could get a copy for Your Honor and Dr. Erba.

And, again, for the record, and for those who are listening online, this is the now I believe resubmitted MIG-prepared Exhibit MIG-31, that's been labeled and admitted as Exhibit 323, that we have represented is an extraction except for the last column being different of the proposal versus the Wisconsin third iteration average.

THE COURT: And would you read into the record its name, Exhibit 323 MIG --

MR. ENGLISH: 31.

THE COURT: Keep reading. I'm talking about the

heading here that includes the word "corrected."

MR. ENGLISH: Well, you have a copy I don't have, Your Honor, because I've got the old version.

THE COURT: Okay.

MR. ENGLISH: You are more up to date than I am.

THE COURT: I feel quite elevated.

"Exhibit 323, MIG-31, NMPF, underlined, Final Class I Differentials, June 2023, Anchor Cities Corrected Header."

You may proceed.

MR. ENGLISH: I believe somewhere, if it's the corrected version, it should also say "Prepared by MIG."

THE COURT: Well --

MR. ENGLISH: Maybe you don't have the most recent version.

THE COURT: Well -- oh, you are correct. Okay. To the left of what I read it says, "Prepared by MIG." It's also a MIG exhibit, and I did read "Exhibit 323 MIG-31."

MR. ENGLISH: Your Honor, that -- what you have is what we submitted today in response to our conversation that I had with Ms. Hancock, that we were going to before it was admitted make a modification, and the modification is to say "Prepared by MIG." And we did submit that. And if we didn't send a copy, we will get a copy to everybody.

BY MR. ENGLISH:

Q. So, Dr. Erba, looking at this, we have Charleston anchor city -- I'm not going to try to pronounce the name

of the county -- West Virginia.

And indeed, there's a $4.70 model average, and a $4.70 proposed, for a difference of zero, correct?

A. Correct.

Q. And similarly, although I believe in your testimony you call it Verona, Virginia, in Row 2917, Winchester, which is Winchester City, because Virginia is what it is, in the Commonwealth of Virginia, similarly you had a 4.50 model average, 4.50 proposal, and a zero difference, correct?

A. Yes.

Q. Okay. Let's just briefly divert, because in your testimony you refer to the city of Verona, Virginia, which I believe is an unincorporated area of a county that's 90 miles southwest of Winchester.

A. Yes.

Q. So which one's correct?

A. Well, we used -- we used the -- them interchangeably. And I -- as I understood, of course, I didn't know where either one was when we talked about this back in September of last year. I assume that they were a little closer than that. But they are relatively close. So we used those interchangeably. Verona was what we talked about the day that I participated.

Q. Okay. It looks to me to be 89 road miles from Winchester to the southwest.

But you have used them interchangeably?

A. Yes.

Q. Okay. Now, we'll talk a little later today -- maybe before lunch, maybe not -- about what was done for Sharpsville, Pennsylvania. And you have already discussed in your testimony, Chicago, which was down $0.60.

So that decision basically to take Chicago down $0.60 was made during that initial meeting for setting up the anchor cities?

A. No. That was -- it was an iterative process, and Chicago was one of the cities that we revisited several times as that was one of the key places where quite a few of the territories, the regions that we're looking at this. So I don't think it was ever as high as what the model said it should be. We already talked it down as a group to say, we need to start that lower.

The Mideast would have liked to have seen that a little bit higher, but we agreed that we had to come up with a number that everybody could live with, and that's where we ended up. So that did change quite a few times.

Q. So in the Mideast you just said that you thought that number actually should be higher, correct?

A. That's where we were initial ly trying to push it. And we were -- and we don't market milk in Chicago from the Mideast, typically. It made sense to us because of the way that Chicago is set up, in terms of the traffic especially. It's difficult to get trucks through there. But we don't market milk there, so we deferred to the people who do, and they said it should be lower, so we said, okay, we can live with that.

But we had to -- our point was that one of the initial things that we had to get corrected was Chicago and Grand Rapids need to be about the same, so wherever Chicago ended up is kind of where we started our analysis.

Q. I think you anticipated where I was going because you discussed in your testimony about trying to match it.

So in a way, once Chicago went down from $3.70 to $3.10, that meant Grand Rapids had to go down, correct?

A. They were already -- we already had a low number. I think the initial number was 3.20 before we did any of the work with the rest of the Mideast. So we didn't -- we weren't very far off initially.

Q. Was that what the model had for Grand Rapids?

A. I don't know actually. I don't think so. I'm not sure.

Q. So similar to Chicago being an iterative process and somebody came back and said, that's what we need, was -- was Denver discussed, Row 233, and set as part of an iterative process, or was the $0.80 increase from the model in the proposal laid out when you first established the anchor cities?

A. Denver, I do not know. That was very clearly outside the Mideast Area, and I didn't have any discussions about what was going on with Denver.

Q. Would that be similar if I asked you about Amarillo?

A. Yes, that would be similar. I did not have any discussions about what Amarillo should be.

Q. Okay. What about Norman, Oklahoma, was that also similar?

A. Also similar. I did not have any discussions about what would be in that central part of the U.S.

Q. What about either Phoenix or Yuma, Arizona?

A. Yes, very much so.

Q. "Very much so" that you did not involve --

A. I was not involved.

Q. And notwithstanding your prior involvement in California, would that also be the case for the two California cities, Los Angeles and San Francisco?

A. Very early on because it was a new process, I was asked to sit in on some of the Western region meetings, which I was happy to do, and explain what I understood about the model and what it meant. Other than getting them started on what that discussion should be and how they should go about it and what those results meant, I didn't participate in what those final numbers looked like.

Q. How about preliminary numbers?

A. They would have been very preliminary. Like a-year-ago numbers.

Q. Do you remember what they were?

A. Top of my head, no. Qualitatively, I would say that the numbers in San Francisco and LA, I would have encouraged them to be higher than what the model said for the reasons that have been discussed, traffic concerns mainly. But beyond that, no.

THE COURT: What concerns mainly?
THE WITNESS: Traffic. Congestion.
THE COURT: I still don't --
THE WITNESS: Traffic. Cars, trucks, highways. Traffic.
MR. ENGLISH: Traffic, T-R-A-F-F-I-C. Correct?
THE WITNESS: Yes.
THE COURT: Thank you. I am familiar with traffic. I don't know why I had trouble with that word.
MR. ENGLISH: Because we have been in this wonderful jurisdiction with roundabouts.
BY MR. ENGLISH:
Q. Did you then choose a different subset after the anchor cities to be the next set? Was there sort of like a subset of anchor cities within the Mideast?
A. Yes. And that's part of that ten two-city pairings that I went through in -- in some detail. Those are the cities that made the most sense to us to get some, again, I would say maybe a secondary spine that would run across the Mideast. It's something that everybody could understand, all the participants in the Mideast discussion could understand where those were and what the challenges were to get milk to move there.
Q. And was the idea that these anchor cities would be major consumption points?
A. Not necessarily. They tended to be larger cities, although we have some on there that are not large cities. Those were just the ones that are the most familiar with

the folks that were in the discussions.

Q. So, for instance, Pittsburgh is a pretty large city, correct?

A. Yes, it is.

Q. And Sharpsville is not a very large city, right?

A. That's correct.

Q. So why was Sharpsville chosen rather than Pittsburgh?

A. Sharpsville is a location of one of the Class I plants, and we wanted to make sure that we had discussion around that, particularly since there's a large cheese plant less than an hour away from that. So it was an important city to get right.

Q. Okay. But that large cheese plant is running at full capacity, correct?

A. I think for the most part it is, yes.

Q. So it's not as if -- like the conversation that Mr. Rosenbaum had with Mr. Sims yesterday, it's not the same thing as pulling milk away from a cheese plant in Amarillo to Dallas, is it?

A. I don't know if I would make that comparison. I wouldn't -- I wouldn't want to hazard that guess. But I do know it is difficult to get milk there, and it's been increasingly difficult to get milk there. And it is a challenge. Every year we have the negotiation about how to set up the supply agreement with that plant and -- I'll just leave it at that.

Q. So when we were talking about "that plant," we

were referring to the cheese plant, not the fluid milk plant?

A. The Sharpsville plant. Sorry. I got this mixed up. It is New Wilmington that's the cheese plant. Sharpsville is the Class I plant.

Q. And the answer to your question a minute ago was about getting a supply to the New Wilmington plant, correct?

A. New Wilmington cheese plant, yes. They are about an hour apart from each other.

Q. So with respect to Charleston, you then worked your way north, I believe you said? Your testimony, you --

A. Well, we kind of branched out from Charleston in virtually all the directions that would be applicable to the Mideast. So north and west and far north. Yes.

Q. But with respect to the conversation -- and I apologize, I should have predicated this. So we're about to talk about Western Pennsylvania.

And to that extent, as I read your testimony, that's where you worked north from Charleston, correct?

A. Yes.

THE COURT: I just want to make sure this is easy for anybody to grasp wherever they tune in.

Have all your references today been to Charleston, West Virginia?

THE WITNESS: Yes.

THE COURT: Thank you.

MR. ENGLISH: I apologize, Your Honor. I should have made that clear. Yes, on Exhibit 323, we're discussing the anchor city, Row 2979, Charleston, West Virginia, FIPS code 54039. And I do not intend, and unless our witness takes us into an unexpected direction, to talk about a different Charleston.

But thank you, Your Honor.

BY MR. ENGLISH:

Q. And so as I think your testimony on page 13 says, you looked at the results, and then you fine tuned it some more, correct?

A. Yes.

Q. Okay. And that was I think, quote, to correct for pricing inconsistencies, correct?

A. Yes.

MR. ENGLISH: I hesitate to do this before lunch, Your Honor, but if we could have the witness provided with Exhibits 300 and 301.

THE COURT: We can.

Now, are -- can the record copy be returned yet, and if not --

MR. ENGLISH: I'm going to ask for it again. So the question -- I think it makes more sense to keep it, but I'm not going to use it right this second. So if you would rather return it and wouldn't mind retrieving it when I need it later, then that's fine. I'm certainly not going to use it before lunch.

And not to try to break for lunch early, but I

don't know if now's the time to start with 300 and 301 or whether you want to --

THE COURT: No, it is time to start with them.

I would like us -- Mr. English, if you will help me -- I would like us to return these record copies so that they are properly with the Agricultural Marketing Service over lunch.

So now we have borrowed another record copy that the witness is being handed. Thank you, Mr. English, for that. And I will get my copy.

And did you bring rulers?

MR. ENGLISH: I haven't had time to buy them, Your Honor, for some reason.

THE COURT: All right. I'm situated and ready to go. Thank you.

BY MR. ENGLISH:

Q. So we're going to look at Pennsylvania and --

THE COURT: Which one? 300?

MR. ENGLISH: 301.

THE COURT: 301. Okay. Good.

MR. ENGLISH: 301.

BY MR. ENGLISH:

Q. And I want to look at Rows 2220 -- sorry. It's the ID is -- so 2221 is the row. 2237 and 2254.

And what these are, are Butler County, which is Pittsburgh, correct, Dr. Erba?

A. I think Pittsburgh is in Allegheny County, but they are right next to each other.

Q. Thank you very much. 2213.

THE COURT: Tell me again what row?

BY MR. ENGLISH:

Q. All right. We're not going to look at Row 2221. I believe we're going to look at 2213, which is Allegheny County. Thank you, Dr. Erba. Working too late last night.

And that's Allegheny County, and that's where Pittsburgh is, correct?

A. I believe that is correct.

Q. And Sharpsville is in Mercer County?

A. Yes. That is correct.

Q. And that is 2254.

And Fayette is 2237, and that's also known as Uniontown, correct?

A. Yes.

Q. Okay. So, now, linking first, Allegheny, which is Pittsburgh, and Mercer, Row 2254, which is Sharpsville, do you agree that right now the differential for both is $2.10?

A. Yes.

THE COURT: And which column is that?

MR. ENGLISH: That's Column L. Thank you -- I'm sorry, on this sheet, it is Column I. It was always Column I, but Column I.

THE COURT: Current differential.

MR. ENGLISH: Current differential is $2.10.

BY MR. ENGLISH:

Q. And I was ahead of myself. Column L would be Sharpsville at $4.20, and Allegheny at $4.15, correct?

The model average would be $4.15?

A. Yes.

Q. And then if you go to the proposal, although you have modified it, so I'll go to the modified number, because the proposal from Column O has $4.40, but now for Pittsburgh you say $4.20, correct?

A. Yes.

Q. Okay. So that's $4.20. But Mercer County is $4, correct?

A. Yes.

Q. So today, Sharpsville and Pittsburgh have the same Class I differential. Under the model, Pittsburgh would be $0.05 less than Sharpsville, and after your adjustment, today, now Sharpsville is $0.20 less than Pittsburgh, correct?

A. I believe that is correct.

Q. And plants in Pittsburgh are all proprietary operators, correct?

A. I don't know that for sure, but I'm going to say I think so.

Q. And Sharpsville is owned by DFA, correct?

A. Sharpsville is owned by DFA.

Q. And in your testimony you said that Sharpsville doesn't compete directly in Pittsburgh with the Pittsburgh operations, correct?

A. Yes. That -- Mercer County is several counties

north of where Pittsburgh is, so they're not in that same geographic area.

Q. But, in fact, that plant sells significant volumes in Pittsburgh, doesn't it?

A. I don't know that.

Q. You would have no reason to contradict Mr. Turner when he returns and will say that?

A. I -- I truly don't know. You would have to ask somebody who actually knows what those selling patterns look like.

Q. In fact, because that's not your role, right?

A. That is not my role.

Q. So what specifically about the model is incorrect when it comes to the conclusion that whether a nickel or the same, Pittsburgh and Sharpsville should be either a nickel lower for Pittsburgh or the same as Sharpsville? What is wrong with the model on that particular issue?

A. I think the issue there is the same as what it is other places, and it doesn't really take into account the difficulty of moving milk in or out -- or dairy products -- out of those plants into those areas. So -- with respect to Allegheny County, it's more difficult to move through Pittsburgh. You would expect that it's far enough south where there should be a price difference anyway, different from Sharpsville, and that's the way we assigned it. This was also close enough to the border of the Northeast where we had to make some adjustments to make sure that we lined up with the Northeast as well. So

those would be some of those counties that were lying close enough to the seam where we needed to get some adjustments made.

Q. Well, there's a lot to unpack there. Let's start with, before you get to the Northeast, you have got the unregulated territory between Orders 1 and 33, correct?

A. Yes.

Q. And Western New York is also subject to a state order and not necessarily the Federal Order, correct?

A. As far as I understand it, yes.

Q. Okay.

THE COURT: Mr. English, I hate to stop you, but I'm going to. I would like to break for lunch now for about an hour.

MR. ENGLISH: Do we want to return those two during lunch?

THE COURT: Yes. Would you please take a moment now and take those record copies and return them to the Agricultural Marketing Service? And then we'll have you get them again after lunch.

And is there anything further that we want to announce before we break for lunch?

Nothing further. We'll resume with this when we get back.

Please be back and ready to go at 1:05 p.m. We break at 12:02 p.m.

(Whereupon, a luncheon break was taken.)

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TUESDAY, OCTOBER 10, 2023 - - AFTERNOON SESSION

THE COURT: Let's go on record.

We're back on record at 1:05 p.m.

There is a preliminary event, Mr. English.

Now, I just want to refer just a moment to the Exhibit 318, and on page 41 there's a mention of the colored pencil crews. Colored pencil.

Now, the wonderful Agricultural Marketing Service has presented me with tools for this proceeding. Three of them, I will guard them with my life. I allow the witness to use one. The name of this ruler is the "Pencil Grip." And since I only need one, and I have given the witness number two, and I have a third one, I would allow whoever is at the podium to use number three.

Would you approach, Mr. English?

MR. ENGLISH: I approach, and I accept. And I thank you, and I thank AMS.

THE COURT: Every knew I needed a yardstick. The yardstick would have been ideal. But this will be easier in my luggage back and forth.

MR. ENGLISH: And I also promise to return it. Or leave it up here for the next person.

Your Honor, good afternoon.

BY MR. ENGLISH:

Q. Dr. Erba, good afternoon. My name is Chip English for the Milk Innovation Group.

When we broke, we were looking at Exhibits -- well, I haven't yet looked at 300. So, you know what,

let's just bring up 301 for now. And if I may have a copy again for the witness, which we returned during lunch to the care of USDA.

A. Thank you.

Q. Now, I have a few preliminary questions before getting back to that.

One, going back to near the beginning of our conversation, and this is about if there were principles articulated in writing. And I did not follow at the time, but am I correct that you said you saw one e-mail or maybe more than one -- an e-mail early on that articulated discussion points or criteria, maybe I'm getting it wrong, as to what the principles would be for the modifications?

A. I would call it more of a reminder of the kinds of things that each of the participants need to keep in mind. It wasn't a prescriptive list, and it certainly wasn't meant to be limiting. It was more of a reminder of, this is what we discussed in our initial meeting, see if you can adhere to these same kinds of ideas as you have your individual discussions.

Q. And do you recall what the reminder list was?

A. I think it was similar to what was mentioned earlier and just basics of the markets. So where are the supply points, where are the demand points, what are any considerations we might have for why we think it is -- milk is more challenging to market -- milk is more challenging to market in some areas versus others. Just -- just basic reminders of what it is we're trying to

do and how we're trying to do it.

Q. So thank you very much.

So now going back to where we broke off before lunch, and I haven't been this specific, but I'm essentially discussing page 14 of your testimony.

And we were discussing the question of Sharpsville, Pennsylvania, Mercer County, and the proprietary operations in Pittsburgh, Allegheny County, and the fact that presently the Class I differential is the same, the model had a modest decrease in the -- sorry, I shouldn't use that phrase -- had a model $0.05 difference in favor of Pittsburgh, and when National Milk made its proposal, as corrected or adjusted today, Pittsburgh is $0.20 higher than the Sharpsville DFA plant, correct?

A. You are going to have to give me a second to find my rows again.

Okay. Yes.

Q. "Yes," you agree?

A. Yes.

Q. Now, what specific information do you have for this record that suggests the model was incorrect and that National Milk's approach granting DFA a $0.20 advantage over the proprietary operations in Pittsburgh is the correct solution?

MS. HANCOCK: Your Honor, I don't know that that's the right way to state that, and I don't want the witness to respond to an argumentative question in a way that

adopts testimony that is not his.

THE COURT: I agree with you, Ms. Hancock.

Clever, Mr. English, but I would like you to eliminate your distinction between the DFA plant and the proprietary plant and instead ask a more open-ended question.

MR. ENGLISH: Well, I --

THE COURT: I know it is cross.

MR. ENGLISH: It is cross, and I think it matters a whole lot as we go through this conversation, Your Honor, and it's going to be -- it is going to happen repeatedly, because the fact of the matter is that over and over again there are going to be examples where the model had a result that either had plants at the same or in the reverse order they now end up in, and, coincidentally or not, the cooperatives end up with values that are lower than proprietary operations.

And that is an important point for this record. It's important for USDA to consider how it is -- how AMS is being asked to use the system in what we view as an anticompetitive way.

THE COURT: I appreciate your point of view, and that is your argument for me to allow you to ask the question as stated, but I decline to. Rather, do what you have very carefully done. You have step by step had this witness testify as to where these plants are, and if you want, you can go back over that to make your point as to where they are.

But that final question should be phrased in such way that your ultimate determination of what happened is not in your question, but rather this witness can testify as to the facts.

MR. ENGLISH: So is it your instruction that I cannot identify the ownership of the plant as I ask the question?

THE COURT: No, no, no. That's not my instruction.

MR. ENGLISH: All right. I will -- I will see --

THE COURT: I would like you to identify the ownership of the plants before you get to the ultimate question. Which I think you did before lunch. But I'm inviting you to go back over that.

MR. ENGLISH: Thank you, Your Honor.

BY MR. ENGLISH:

Q. So what specific information do you have, Dr. Erba, for the record, as to why plants located in Pittsburgh should end up with a higher Class I differential than a plant located in Sharpsville?

A. It follows the same approach that we used everywhere, and that is it's more difficult to move milk to the east and to the south. And Pittsburgh is one of the southernmost occasions of where we move milk in the Mideast fairly routinely. So to me, it's not particularly alarming that the differential around Pittsburgh is higher than one that's being compared to quite a ways north of that.

I guess the other thing I would look at is to say that the numbers that we have proposed in the NMPF proposal are not that far off what the -- what the model recommended to begin with. So I can understand why there's maybe a little bit of a concern that there is that difference, but it wasn't intentional, despite what it may appear to be. It was just the way we came across, and we had the discussions how we set the differentials up to have a continuous, contiguous, explainable price surface.

Q. Can you provide specific economic information as to why you deviated from the model in the case of Sharpsville and Pittsburgh where the model had Pittsburgh $0.05 less than Sharpsville?

A. No. Qualitatively, yes. If you want specifics, no. Just we know that it's more difficult to move milk in that direction, and that is how we set up those differentials in that part of Pennsylvania.

Q. So if Mr. Turner appears later in this hearing to discuss his disagreement and specifics as to why he thinks that moving milk to Pittsburgh is at least as easy as moving it to Sharpsville, you do not have specific information to contradict him?

A. No. But I would be interested to hear what he has to say about it.

Q. Similarly -- and I confess, I was a little confused, but I think I understand it -- at the end of the paragraph, at the top of the page discussing Western Pennsylvania, you say, "The same sentiment applies to the

plant located in Fayette County as is located further south of the Pittsburgh market."

That's Uniontown, correct?

A. I believe that's correct.

Q. Okay. And when you say "the same sentiment," do you -- what are you referring to? That your view that the plant in Mercer County is not competing directly with that plant in the Pittsburgh market?

A. I would say the same sentiment in this case means that it's more difficult to move milk south and east, and that's what's reflected in those Class I differentials.

Q. And what specific information do you have for deviating from the model with Fayette County?

A. I guess I better see what the deviation is first.

So, again, this is a, from what I can tell, $0.15 per hundredweight difference from what was proposed to what was suggested by the model. And our feeling as a group was that we need a little bit more of a differential to attract the milk to get that far south and east of the Mideast Area. Beyond that, I have nothing more specific.

Q. And, now, do you agree that the plant in Mercer County is owned by DFA?

A. There is a plant in Mercer County owned by DFA, yes.

Q. Is there any other plant in Mercer County?

A. Well, I'm not exactly sure where the county line is, but there is that cheese plant and Class I plant that are in close proximity. I'm not sure if they are in

different counties or not.

Q. And I apologize for my lack of specificity. Is there a -- the plant I have been referring to in Sharpsville is a Class I plant, correct?

A. Yes.

Q. Is there another Class I plant in Mercer County?

A. Not that I'm aware of.

Q. And the plants in Pittsburgh and Uniontown, Pennsylvania, are proprietary plants, correct?

A. Yes. I believe that's correct.

Q. Okay. So let's go to the next paragraph, Ohio.

So Clark County, you have adjusted downwards in your testimony from $4 to 3.70, correct?

A. That is correct.

Q. And Wayne County, Indiana, is west of Clark County, Ohio, correct?

A. That is correct. Yes.

Q. And, now, your principle that it is more expensive to move milk east, shouldn't Clark County then be above Wayne County?

A. I suppose it could be. But in the way we discussed this, it made the most sense to move that into the same pricing zone because our feeling was, amongst the cooperative representatives that discussed this, that those plants would all compete for the same business, so they should be in the same zone.

Q. And that principle applied for a Clark County operation that's a -- owned by a co-op, correct?

A. I'm not positive of that, so I will just say I don't know.

Q. Okay. Nonetheless, the principle of equalizing raw product cost, as you discuss at the end of the paragraph, applied with respect to Clark County, correct?

A. Yes.

Q. But that principle did not apply with respect to Western Pennsylvania, did it, sir?

A. I think it did. It's just different geography, different roads, different ability with different ease of moving milk in and dairy products out. So it's -- to me, they are not exactly the same thing. And we would suggest that, again, we are not very far off of what the model suggested, and we're comfortable with where we ended up.

Q. But you don't have specific evidence for those costs of those roads or evidence to contradict Mr. Turner if he comes and says something different at the end of the hearing?

A. Again, I would be interested to hear what he has to say.

Q. Let's turn to your testimony, Figure 1.

A. Excuse me. Can I move this to the side now, or no?

Q. You can move it to the side, but we will come back to it.

So your testimony, which is Exhibit 336 NMPF-38 Amended, I want to look at page 15.

A. Yes.

Q. And I happen to be one of those people who thinks a picture is worth a thousand words. And I'm sure I'm way past a thousand.

When you look at this map, this is the NMPF proposed Class I differentials, correct?

A. For Figure 1?

Q. Yes.

A. Yes. Yes.

Q. And this is, I believe, corrected for Pittsburgh at $4.20, correct?

A. No.

Q. It's not?

A. No. Unfortunately, I did not go back and review the graphics according to the testimony I had. So Allegheny County is still incorrectly marked on this, as is Clark County. They are in the wrong pricing zones.

Q. Okay. So Pittsburgh in your picture is in a blue zone?

A. Yes. And it should be yellow.

Q. Well, I think my principle still applies.

If you look at the map, southwest into Ohio, the line looks, you know, relatively straight coming -- moving up at a 45-degree angle; would you agree? The bottom of the red line --

A. And the blue --

Q. -- and the counties?

A. And the blue line --

Q. And the blue --

A. -- where they intersect.
Q. -- line where they intersect --
(Court Reporter clarification.)
BY MR. ENGLISH:
Q. So looking at Figure 1, and looking at Ohio, and looking at the red line and the blue line, you would agree that it's moving relatively close at a 45-degree angle, correct?
A. Yes.
Q. Okay. But when you get to Pennsylvania, that stops, and if -- but I'm asking -- so what I'm asking is, if you continued that line moving at the same 45-degree angle, wouldn't you include most, if not all, of that county that Pittsburgh is located in in the red zone?
A. That would be another way of doing it. Yes.
Q. Thank you, sir.
So we have talked a couple times around this issue, and let's be a little more specific.
Order 1 and Order 33 do not directly connect, do they? There's no place where you could draw a line where Order 1 and Order 33 are connected, correct?
A. I thought there was, but maybe there is not. If there is any place, it's very slim.
Q. Okay. And there's a fair number of counties in Central Pennsylvania that are not -- not part of either marketing area, correct?
A. Yes.
Q. And to the extent that they are regulated by

Federal Orders, it is as partially regulated plants under Section 76, correct?

A. I believe that would be correct, yes.

Q. So they are not required to pay into the pool, Federal Order pools. They are -- they have to account for the pools under one of those options of 76, but they don't actually have to contribute to the pool if they use the Wichita option, correct?

A. That's a little beyond my understanding, so I'm going to take a pass on that. I don't know the answer.

Q. Do you know or did you consider in your committees in establishing the differentials on that eastern side of the Mideast order, the competitive situation that those plants -- fully regulated plants have with respect to partially regulated plants in the central part of Pennsylvania?

A. I can say we did not make that detailed a comparison. Our concern was to set up Class I differentials that would aid us in the movement of milk to Class I plants from the Mideast Area. We did not go into a -- any kind of in-depth discussion or decision-making using some of the more esoteric bits of information about Federal Orders that you have described.

Q. On page 15 of your testimony, you discuss that for 387 counties in Federal Order 33 and parts of Order 5 in Central Kentucky and Southern Indiana, National Milk Producers Federation's proposal only modifies -- is it still 3% or has that number changed, of counties by more

than $0.25?

A. The correct number should be 406 counties. That's at the bottom of page 15.

Q. I -- I should have started here actually.

Do you know -- because I confess, I spent my time on the original -- do you know what the amendments are in Amended 38 as compared to 38? Do you recall?

A. Yes. I could not probably point out every single one of them. A lot of them were grammatical.

Q. Okay. Ignore the grammatical ones.

A. The section we're on currently on Section 15, when I did the sorting in the Excel file, I inadvertently left a filter on or off, I don't know which, but I end up with a smaller number of counties than there should be. So that was the -- the main correction in amended is this paragraph that we're talking about that starts on 15 and carries over to 16 and has to do with the number of counties.

Q. Thank you, sir.

A. Yes.

Q. Do you know for those areas how many counties National Milk modified by any amount from the model average?

A. I don't know that. I did not count it up that way.

Q. Do you know with respect to just Order 33 -- so not including any counties from Order 5 -- how many counties there are and how many you modified?

A. I didn't count it up that way. We split it out by the different orders.

Q. Would it surprise you if you looked at just Order 33, there are 303 counties and National Milk Producers Federation proposes to modify 278, or 92%?

A. No, that wouldn't surprise me too much. I guess I would point out that most of the modifications we made or are suggesting to make are fairly small.

Q. So let's bring up 300.

A. 301.

Q. I want you to keep 301 and 300. I'm going to talk about the --

THE COURT: He's just getting his delivered.

MR. ENGLISH: Yes, I understand.

THE COURT: Thank you.

BY MR. ENGLISH:

Q. So looking at Exhibit 300 -- and I think you were here for Mr. Sims' examination. I'm going to focus on Columns O and Columns S of 300.

THE COURT: O and?

MR. ENGLISH: O and S.

THE WITNESS: Okay.

THE COURT: S.

MR. ENGLISH: S as in Sam. O as in Ohio.

THE COURT: Thank you.

BY MR. ENGLISH:

Q. Do you know why in some instances Column O is different from Column S?

A. I don't know. As I have pointed out before, this was an iterative process. And it strikes me that O was probably an earlier version of what the discussion was, and S was some kind of a later version that had additional discussion, perhaps some small changes made to get prices aligned better. I know that's what we did in the Mideast. I suspect it was the same thing that was happening everywhere.

Q. Well, actually, you say you know it was the Mideast. At least when we did the analysis, it appears to us that in the Mideast there were no changes between Column O and Column S.

Would that surprise you?

A. Maybe a little bit, because I know we went through this process in iterative ways. It just depends on which -- what the date was that Column O represents relative to Column S. And from what you said, I would suggest that maybe Column O was later in the process and closer in date to Column S than maybe what I was thinking.

Q. And now keeping 300 in front of you with Column S, and bringing up 301 with Column O. So, again, 300 was what National Milk submitted in May; 301 was what National Milk submitted in June.

Do you know from your information what differences there are between Exhibit 300, Column S, and Exhibit 301, Column O?

A. Specifically, no.

Q. Again, would it surprise you if, in the instance

of the Mideast, the answer is there were no changes?

A. That doesn't surprise me too much. We had our price surface dialed in relatively early in the process, and our discussions with Northeast, Southeast, to some extent Midwest, were done relatively early in the process. And I would say our -- and this is just going off of memory -- our last changes were back in May, if I'm not mistaken. So they had been pretty well set for a while.

Q. Give me one moment.

Thank you very much, sir. I am done. That means I've got a few minutes to get back his exhibits and my materials. And I appreciate very much your time, sir.

THE COURT: Let's go off record, take a five-minute stretch break, while we move these papers around.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record.

We're back on record at 1:42 p.m.

MR. ROSENBAUM: Steve Rosenbaum for the International Dairy Foods Association.

CROSS-EXAMINATION

BY MR. ROSENBAUM:

Q. I'm going to ask questions that relate to pages 17 through the end of your testimony, which is Hearing Exhibit 336, namely the question of Grade B dairy farms versus Grade A dairy farms. Okay?

A. Yes.

Q. Okay. So to orient ourselves, it is correct,

isn't it, that today more than 99% of all milk marketed is by producers in the United States is, in fact, Grade A milk?

A. That's what was discussed earlier in this hearing, yes.

Q. So to the extent that there was historically some need or desire to persuade farmers to meet Grade A dairy requirements, that's a battle that's been won; is that fair?

A. If you are talking about converting from Grade B to Grade A dairy, then, yes, I would say that's a battle that has been won.

Q. Now, I'm going to leave aside the question whether in light of that answer and those facts the cost of converting from Grade B to Grade A has any current relevance, and I'm going to focus on what the cost may, in fact, be.

Now, I would think that to determine what the cost is of converting from Grade B to Grade A, you would start with determining what actually are the requirements applicable to a Grade B plant.

Did you -- did you look at that question in doing your analysis?

A. The requirements for a Grade B plant?

Q. Yes -- excuse me, farm. I misspoke.

Did you -- did you start in analyzing the cost of converting to or maintaining a Grade A plant -- excuse me -- farm -- sorry, I keep saying plant, I mean farm --

start with an investigation of what requirements apply to a Grade B farm?

A. No.

Q. Well, how is it you can determine what the cost is of converting from a Grade B farm to a Grade A farm if you don't even know what the requirements are for a Grade B farm?

A. Because we assume we are starting with a Grade B farm that meets those requirements already. That's why it's a Grade B farm.

Q. But don't you have to then determine what the differences are between the requirements for the Grade B farm and the Grade A farm?

A. We did.

Q. You did?

A. That's what's in the testimony.

Q. But you did that without actually looking to see what the requirements were for a Grade B farm?

A. We assume we start with a Grade B farm.

Q. And what did that mean in terms of the physical requirements for a Grade B farm?

A. Whatever those could be. This is a theoretical look at how do you get from a Grade B farm, dairy farm, to a Grade A farm. And the requirements that we were interested in is what things are missing from a Grade B farm that need to be in place for a Grade A farm.

Q. And you made that determination without looking into what the requirements were for a Grade B farm?

A. We assume we started with a Grade B farm.
Q. I know, but you didn't -- you didn't check what the actual requirement -- statutory or regulatory requirements were for such a farm; is that right?
A. We did not.
Q. Okay. So I'm holding up a document that is a publication by the U.S. Department of Agriculture, Agricultural Marketing Service Dairy Programs, called "Milk for Manufacturing Purposes and Its Production and Processing, Recommended Requirements, Effective July 1, 2011."
Are you familiar with that document?
A. I'm not.
Q. Do you know whether this is the current version of the document? I assume the answer to that is no?
A. I do not know.
Q. Do you know whether this document has been adopted as law in many states?
A. I do not know.
Q. It's called "recommended requirements," but do you know whether it actually is literally a legal requirement in a number of states because they have adopted it?
A. I am not familiar with that document, so I really can't answer that question.
Q. Do you know whether many countries, including the EU, require that before any product is exported from the United States there, the milk must come from a farm that at least meets the requirements of this document?

A. I don't know what's in that document, so I can't answer that question.

Q. Okay. So let's look at the items you identify on page 21, starting on page 21, as costs. And you have Items 1 through 11, correct, going on to the next page?

A. Yes. That is correct.

Q. And these are costs that you assert are necessary to get from a Grade B farm status to a Grade A farm status, correct?

A. I would say it differently. The requirements are what they are. We simply took an example and said, what might those costs actually look at -- look like? And part of our exercise was to see if the $0.40 per hundredweight that USDA used in the 1999 decision still applied. And we wanted to look at the maintenance cost, not necessarily the cost conversion, which USDA stated pretty clearly that their -- as you said, the battle has been won, and we don't need to worry about converting from Grade B to Grade A anymore, but we do have a cost to maintain Grade A.

And our way of looking at this was to say, let's build up from a Grade B dairy to a Grade A dairy in the conversion sense. Then pick out those costs which are ongoing, variable costs and say, that's the cost of maintenance. It is an estimate. I'm not saying it is the only way of doing this. But we really wanted to see if that $0.40 was in the ballpark or not.

And what our analysis showed is that it's a little

bit light, that we are considerably higher in costs, maintenance costs, than what the $0.40 would suggest.

Q. But, sir, you in addressing the maintenance costs applied a percentage to the construction costs, correct?

A. No. I don't think that's correct.

Q. You say at the bottom of page 22, and I quote: "Estimated maintenance costs for physical assets, such as barns and other farm structures, range between 2% and 5% of replacement cost. Using construction costs as a proxy for replacement costs and using 3% as the maintenance cost, the cost to maintain the physical structure cited in the cost of convection analysis amounts to $21,750 per year, or $0.85 per hundredweight."

I read that correctly --

A. Yes.

Q. -- yes?

And that component, that $0.85 per hundredweight, makes up more than half of what you claim to be the estimated ongoing cost of maintaining a Grade A license of $1.46 per hundredweight, correct?

A. Yes. You have to maintain those physical assets. That's part of what the PMO states.

Q. But -- and that -- but the accuracy of your calculation presupposes the correctness of your information in Items 1 through 11 as to what it would cost to change from Grade B farm status to Grade A farm status, correct?

A. As I said, this was an exercise to see if the

$0.40 per hundredweight the USDA cited from 1999 was still relevant. Our analysis, and you can call it rudimentary if you'd like, suggests that it is not accurate, it's too low.

Q. Am I correct that over half of your estimated ongoing cost of maintaining a Grade A license is comprised of a percentage of what you say was the construction costs of changing the farm from Grade A status -- Grade B status, excuse me, to Grade A status?

A. Construction costs was our best guess at replacement cost, and I think it is a decent proxy.

Q. And you used the construction cost sets forth in Items 1 through 11, and then applied 3% to that to come up with $0.85 per hundredweight as a component of the total $1.46 per hundredweight cost of maintenance?

A. Right. It's the cost of maintaining those physical structures as required by the PMO.

Q. Okay. And -- all right. And you have now referred to the Pasteurized Milk Ordinance, the PMO, correct?

A. Yes.

Q. That is the document that sets forth the requirements for Grade A status for a farm, correct?

A. Yes.

Q. Now, in putting together Items 1 through 11, did you select the least expensive undertakings that would be sufficient to establish Grade A status?

A. What we did was have a conference amongst the

field staff in the Mideast Area who have the most experience on farm and asked them what kinds of things would you have to change to go from a Grade B dairy to a Grade A dairy. And that was the list we used.

Q. And did you personally review each of the items here on list 1 through 11 and check them against the Pasteurized Milk Ordinance to confirm whether or not these were, in fact, undertakings required in order to achieve Grade A farm status?

A. I would say the answer to that is, yes, we did that.

Q. You --

A. In our opinion these -- the items that we have listed are consistent with what was found in the Pasteurized Milk Ordinance. We're going from a Grade B dairy to a Grade A dairy.

Q. Did you do that, was my question?

A. Did I review them?

Q. Did you review each of these items to determine whether they were, in fact, required by the Pasteurized Milk Ordinance?

A. Yes, I participated in these discussions.

Q. Okay. So let's take -- I'm going to take the first -- this one a little out of order, Item 2, "install a toilet facility."

Now, you estimate a $15,000 cost for that, correct?

A. Yes.

Q. Does the PMO actually require that there be a toilet facility in the milk house or milking parlor?
A. Yes.
Q. You're confident about that?
A. Yes, I am.
Q. It is not merely required there be a toilet on the farm?
A. It's got to be with a closing -- a door that's able to close in or nearby the milk house.
Q. Can that toilet be in the farm house?
A. That, I could not tell you. My -- my understanding is that it cannot be, but that may not be entirely correct. I think it has to be part of the milk house.

MR. ROSENBAUM: Your Honor, I'm going to distribute a document, which I'll ask to be marked as the next exhibit.

THE COURT: Let's go off record while we distribute and mark the paperwork.

We'll go off record at two minutes to 2:00. Let's come back on record at 2:05.

(Whereupon, a break was taken.)

THE COURT: We're back on record at 2:05 p.m.

Mr. Rosenbaum, the document that you have distributed and have had marked as an exhibit is Exhibit 340. 340.

(Thereafter, Exhibit Number 340 was marked for identification.)

BY MR. ROSENBAUM:

Q. Dr. Erba, I have provided you a copy of Hearing Exhibit 340.

Now, I do want to make clear that what I've given you is the first 61 pages of the Pasteurized Milk Ordinance. I do have -- and I have done that simply because the entire document is 450 pages long, and I'm trying to do something, in a small way perhaps, to limit the bulk of the record.

I do want to say, however, I have with me the complete document, and if at any point you would like to look at that, feel free.

So -- and to orient ourselves, in doing the analysis that appears on page 21 through 23, you, as stated on page 20, were assuming a 100-cow dairy farm, correct?

A. Yes.

Q. And by "page 20," of course, I'm referring to your testimony here in Exhibit 336.

So this is, relatively speaking, and certainly for these days, a small farm, correct?

A. Yes.

Q. All right. So if we turn to page 46 of Hearing Exhibit 340, do you see that there is Item 7r, Toilet?

A. Yes.

Q. And the reference is that -- well, let me start that again.

What's -- what the PMO often does is it states a

requirement, it explains the reasons for the requirement, and then, in what it calls administrative procedures, provides some additional detail regarding how the requirement can be satisfied.

Is that correct?

A. It appears that way, yes.

Q. And so under 7r, Toilet, it says, "Every dairy farm" -- and I emphasize the word "dairy farm" -- "shall be provided with one or more toilets, conveniently located, properly constructed, operated, and maintained in a sanitary manner. The waste shall be inaccessible to insects and shall not pollute the soil surface or contaminate any water supply," end quote.

Do you see that?

A. I do.

Q. And then under "Administrative Procedures," looking at procedure 2, it says, "A toilet or privy is convenient to the milking barn and the milk house."

Do you see that?

A. I do.

Q. Okay. Now, do you agree with me that there's no explicit statement that the toilet needs to be in the milking barn or the milk house but merely convenient to it, correct?

A. That is correct.

Q. And so if the milking facilities are next to the farm house, which will probably not be unusual with a 100-cow farm, a toilet in the farm house would meet this

requirement, correct?

A. I would say in practice that would not be the way that it works. Typically, the farm house is not that close to the dairy farm. It may not be 25 feet away, it may be 100 yards away. And a toilet that is part of the milk house, which is I would say the standard, is more usual.

Q. Are there, in fact, some material number of Grade A farms in the United States that do not have a toilet in the milking barn or milk house?

A. There may be. I don't know if there are or aren't. But from my observation, all the dairy farms that I have been on, Grade A, the toilet is right there in the milk house, it is not part of the farm house that may be several hundred yards away.

Q. So let's go back to Item 1. I skipped over Item 1 momentarily.

So for Item 1, and I'm referring to your list on page 21, you have a $250,000 cost for what you call a "simple structure meeting PMO requirements for impervious surface, lighting, air circulation, animal distribution, et cetera," correct?

A. Yes.

Q. And you in coming up with that estimate are including what you call a double-four herringbone parlor arrangement, correct?

A. Yes.

Q. Tell us what that is, please.

A. That is the milking system that the cows are milked. So it would be basically four stalls in a herringbone, so figure like a 45-degree angle to each other, with a center pass down the middle, where eight cows could be milked at one time.

Q. Now -- okay. And does -- does the PMO require that there be a parlor to be Grade A?

A. I believe the answer is yes. I don't -- I don't know. I confess, you caught me by surprise there. I think the answer is absolutely yes.

Q. If you turn to page 37 of the PMO, Hearing Exhibit 340, there we have item 2r, which is entitled "Milking Barn, Stable Or Parlor - Construction." And it says, "A milking barn, stable or parlor shall be provided on all dairy farms in which the milking herd shall be housed during milking time operation," end quote.

Do you see that?

A. Yes.

Q. So this provides the option of a barn or a stable or a parlor, correct?

A. It's not the barn in the sense of a -- where the cows would normally spend their -- most of their days -- or at least part of their day. This is where they would be housed during milking time operations. So they are not there for any longer than it takes to get them milked and then get them back to the -- their other housing.

Q. Where does it say that?

A. "A milking barn, stable or parlor shall be

provided on all dairy farms in which the milking herd shall be housed during milking time operations."

So they are not housed there all the time. They are there for -- to be milked and then they go back to their other facilities.

Q. Is there some provision of the PMO that relates to this other facility?

A. I believe there is. I would call that is what I have in Item 6, a cow yard and cattle housing area.

Q. Okay. So do you know whether such a milking barn or a milking parlor is also required for a Grade B farm under the USDA recommended requirements for milk for manufacturing purposes and its production and processing?

A. I don't know that.

Q. In your description under Item 1, you talk about this facility to meet PMO requirements, you reference requirements for impervious surfaces, lighting, air circulation, animal distribution, et cetera.

Do you know whether, in fact, there are requirements for lighting, ventilation, impervious materials, with respect to Grade B facilities --

A. I do not.

Q. -- based upon these USDA requirements?

A. I do not.

Q. All right. So Item 3 says, "Construct liquid/solid waste holding structure (lagoon) with a clay liner," correct?

A. Yes.

Q. And that's to deal with -- with cow waste, correct?
A. Yes.
Q. Now, the -- we're talking about a 100-cow farm here, correct?
A. Yes.
Q. Am I correct that the PMO does not, in fact, require such a lagoon?
A. I don't see any requirement for lagoon in here.
Q. And if you turn with me to page 60 of the PMO, Hearing Exhibit 340, which is the last item in the document is Item 19r, Insect and Rodent Control.
Do you see that?
A. Yes.
Q. And I'm not going to read that item, but I am going to, if you will, please look at the Administrative Procedures for compliance with that item, where it says, "This item is deemed to be satisfied when," and number one of that is, "surroundings are kept neat, clean, and free of conditions, which might harbor or be conducive to the breeding of insects and rodents. During fly season, manure shall be spread directly on the fields," and it goes on from there.
Do you see that?
A. Yes.
Q. And does that suggest that one can comply with the PMO and reach Grade A status if, rather than building a lagoon, you simply spread your manure on your fields?

A. I think you could probably do that with a different set of costs. It would be much more labor intensive. You would have to manage the manure supply somehow to keep it from invading the spaces where the cows are housed. So the lagoon may not be the only answer. It is certainly one of the answers and the preferred choice for every dairy farm that I have been on.

Q. And the cost of -- that you have for the lagoon, that's $100,000 in your analysis, correct?

A. Yes.

Q. So Item 4 is "develop a Grade A water supply."

Do you see that?

A. I do.

Q. Now, do you know whether the USDA recommended requirements for manufacturing facilities, which has been adopted as a matter of law in a number of states, whether they also have requirements about the water supply?

A. I don't know that. I'm not familiar with those requirements. But I know that the water supply is a specific requirement for Grade A.

Q. Now, I don't want to mislead you. There is a specific PMO requirement as to the distance of the well from any source of contamination, I believe it's a 50-foot requirement, which does not appear in the USDA guidance for manufacturing plants.

But do you know whether that requirement presents any -- a 50 feet distance provides any particular economic challenge to a Grade B plant -- farm, excuse me?

A. If it was not located properly, then, yes, that would be a problem. You would have to -- to go from Grade B to Grade A, you would have to relocate it, and that's a fair amount of expense to relocate a well.

Q. And have you done any analysis as to how many Grade B farms, there aren't many out there, but for those Grade B farms, whether or not their existing wells already meet that requirement?

A. I have not done that analysis.

Q. So Item 5 is to "acquire, install, and plumb a stainless steel 2,000-gallon bulk milk tank."

And, once again, I'm not trying to mislead anybody. There is under the USDA guidance for Grade B farms, an option either to use a bulk milk tank or to use -- what do we call them?

A. Cans.

Q. Milk cans. There you go. Searching for a very technical word there, a can.

But do you know whether in the real world, other than maybe some of the Amish farmers use cans, but other than that, is there anyone out there who is actually using cans and doesn't have a bulk milk tank?

A. We have a -- in the Mideast Area, a fair number of Amish and Mennonite farms that would still put milk in cans and cool them accordingly. So at least in our area of the world, yes, that's prevalent.

Q. All right. Anywhere else -- like I say, I was vaguely aware of that example.

Anywhere else?

A. I'm not positive. I know that there are Amish communities throughout the U.S. I'm only familiar with the ones in the Mideast.

Q. So Item 6 is to "construct a cow yard and a cattle housing area, a fully equipped free stall barn."

Does the PMO -- well, first of all, back up. What is a free stall barn?

A. That would be where the cattle are housed when they are not being milked or they are not out in the pasture or not in the loafing pen. It's an open-sided barn typically.

Q. Okay. What does the word "free stall" connote?

A. So the cows can access any stall they want. They are not -- in the olden days, they were tied to a specific stall. A free stall would indicate that they can go in any empty stall they want at anytime.

Q. All right. And that may well be desirable. But the PMO doesn't require a free stall, correct?

A. I don't believe they require that, but they do speak to a housing environment for cattle.

Q. And I won't -- no reason for me to keep asking you what the USDA guidance provides for the Grade B facilities since you haven't looked at that.

The next Item 7, "cost of interest on construction/facility remodel loan."

Do you see that?

A. Uh-huh. Yes, I do.

Q. Okay. So that Item 7 really turns on Items 1 through 6, I mean, in the sense that Item 7 assumes you've had to borrow $725,000, which is the cost if you add up everything from Item 1 through 6, correct?

A. Yes.

Q. So the accuracy of the interest calculation turns on the accuracy of the cost of Items 1 through 6, correct?

A. Yes.

Q. All right. So -- okay. The next item says, "regulatory inspections to ensure Grade A standards are being met."

So can you just tell us where the $0.05 per hundredweight number comes from for that item?

A. Yes. This -- well, in the -- if you are referring to the PMO, I'm not sure it is in there. But it is a practical cost and it's what our -- all of our members are charged, the Market Administrator fee, for inspection of the facilities. And they are checked regularly to make sure they are in compliance with the Grade A standards.

Q. And this is -- I mean, does the -- this is an AMS fee, is that what you are saying, when you call it a Market Administrator fee, or am I -- are you mixing two different things in the $0.05?

A. Not sure about that. It's a -- it's an inspection fee that's paid by the farmers, and it has to do with the maintaining their Grade A facilities that they are checked regularly on.

Q. Okay. And so when you say that's $0.05 a

hundredweight, that comes out to -- so to figure out how much that is in dollars, it's 100 cows times 70 pounds of milk a day, that's the assumption that you set forth, times 365 days, divided by 100 to get it to hundredweight, times $0.05? Is that right?

A. Yes.

Q. And so by my calculation, that gets you to $1,277.50.

And you are saying that a 100-cow farmer has to pay that much each year for this inspection?

A. Yes.

Q. Okay. So next line item, "increased electricity for fans, bulk tank refrigeration, manure pumps for lagoon," you have that being $0.15 per hundredweight.

Can you break that $0.15 down among those three items?

A. I cannot. This is a discussion, again, with the field representatives who are very familiar with farms and how they operate, and I simply asked for the increased cost of operating the facilities that we're talking about here. And they mentioned specifically, you would have to pay more for fans for cow comfort, for bulk tank refrigeration, there's a requirement for cooler milk in Grade A than with Grade B, and then manure pumps and whatever other items that would use that extra electricity. So they estimated a $0.15 per hundredweight increase for a farm of this size.

Q. So, obviously, if you don't have a manure lagoon,

you don't have to incur electricity costs for the pumps, correct?

A. Yes. But you would have other costs for how you are going to manage that manure.

Q. And -- and then bulk tank refrigeration, obviously, if you are a Grade B farm that does have a bulk tank, you are going to have that cost, too, although as you mentioned, and I'll get to it in a second, you actually have a slightly different requirement for cooling temperatures, correct?

A. Yes.

Q. And then fans, do you know whether, in fact, the requirements for a Grade B farm include the provision of adequate ventilation?

A. I don't know that. Would make sense that it was. But it's spoke to specifically for Grade A, and that's why it's included here.

Q. Okay. But, in fact, it may be you have to have a fan for Grade B anyway, correct?

A. Maybe.

Q. Okay. Now, in terms of bulk tank refrigeration, as I understand it, the requirement is that for Grade A, you have to cool it to 50 degrees within four hours, and then down to 45 degrees thereafter.

Is that how it works?

A. 45 degrees at pickup would be the absolute maximum, and most requirements are substantially less than that.

Q. Not a requirement of the PMO, though?
A. That is correct.
Q. Okay. And then -- now, do you have any analysis as to what the actual cost is in electricity of reaching the 45 degrees that the PMO requires versus the 50 degrees that applies to a Grade B plant?
A. I do not. I just know that it's expensive to run the chillers, which would be responsible, that's what their job is, to chill the milk. It is expensive to run those, particularly in the summertime. There is an additional cost for certain.
Q. Now, transportation costs is Item 10. And you actually I think discuss that in the text as well, if I'm not mistaken.
On page 20 you refer to this issue as "increased frequency of milk pickups are needed to meet Grade A standards," correct?
A. I got to find where you are first here. You are on page 20?
Q. Yes. I'm sorry. I should have been more explicit. On page 20 --
A. Yes, I got it.
Q. -- under "Milk Hauling," correct?
A. Yes.
Q. And then you're basically adding a cost based upon the notion that to be Grade A compliant, you can only -- you have to be picked up every other day; is that right?
A. At least as frequently as every other day, yes.

Q. Do you know where that is in the PMO? I could not find that, and no one could find that, but maybe we just weren't looking in the right place.

A. It may --

Q. Let me tell you what we did find, and you can tell me if we were looking in the wrong place.

And that is if you look on pages 50 to 51, there is -- let me make sure I have the right place. Yes, on 50 and 51, there's an Item 10r, relating to cleaning. And in the Administrative Procedures in Item 3, there's an item that says, "The milk storage/holding tank shall be cleaned and sanitized when empty and shall be emptied at least every 72 hours," which is three days, not two days. That's the closest we could find to a requirement like this.

But as I say, if there's somewhere -- if we were just overlooking it? A 48-hour rule?

A. I -- I believe you are correct. There isn't a 48-hour rule in the PMO. This is a practical requirement from customers. You do not want milk any older than 48 hours. So we have tried in the Mideast, several times, particularly in the more remote areas, to allow for every-three-days pickup, and that would be a great help as far as hauling, particularly in more remote areas. None of the handlers that we have talked to will allow for that. So it's not a PMO requirement, it's a practical requirement.

Q. And is there any reason to -- suppose that if this

is a practical requirement imposed by your customers, that they would impose the same requirement on a Grade B farm?

A. No. They -- the Grade B -- the plants that will accept Grade B milk are more lenient to allow for three-day pickups.

Q. Once again, this is not a PMO requirement, correct?

A. It is not a PMO requirement.

Q. Okay. So you have another item relating to Item 11, "increased chemical usage and more frequent rubber part replacement to maintain Grade A milk quality standards."

Is there some particular requirement regarding the replacement of rubber gaskets, hoses, and inflation -- inflations that you are referencing there?

A. Yes. There's requirements for bacteria that are more stringent with Grade A compared to Grade B. And, again, this is another place where there's a practical requirement. If you want to have Grade A milk, I think it's been pointed out several times that Grade A milk these days is not simply Grade A milk, it's got to be better than that. If you are going to meet those standards, then you have to be more vigilant about using the appropriate chemicals. The strength of chemicals and replacing parts that could go bad, develop cracks, harbor bacteria, like rubber parts, more frequently.

Q. What part of that is attributable to practical requirements that go beyond the PMO?

A. That would be difficult to say exactly. I don't know where you draw that dividing line. There aren't very many dairies that want to be right on the edge of Grade A, and they are going to try to do better than that. So I'm not sure exactly where you could draw that line. But, again, from a practical sense, you need to have high quality soap, sanitizer, need to replace your rubber parts more frequently. It is simply part of being Grade A.

Q. Okay. So sticking with Item 11, there's also a line item, $0.25 per hundredweight for chemicals.

Do you see that?

A. Yes.

Q. And are you saying that is a cost above and beyond the cost that a Grade B dairy farm would incur?

A. Yes.

Q. And how exactly did you get that $0.25 number?

A. In the Mideast, for DFA, we have a pretty stringent milk quality program, and we monitor milk quality of all of our -- of all of our members. We know what it takes to meet the requirements, and we hear from our members themselves what it costs them to meet the requirements.

And they often complain vehemently that it costs them significant money just to attain some of those standards, and so that's where we get our information from, is what does it cost for chemicals to maintain Grade A. And, again, I point to this is more like Grade A, tending toward Grade A plus, not Grade A at the

very margin of what's Grade A and what's Grade B. And that's what they estimate that costs to be, again, for soaps, for sanitizer, for acid.

Q. Okay. So $0.25 per hundredweight -- let me back up. You recall that you had one cost item that you thought was $0.05 per hundredweight. That's the inspection cost, you remember?

A. Yes.

Q. And I said that you -- okay, if you take a hundred cows, times 70 pounds a day, times 365 days, et cetera, et cetera, you came to a particular cost, correct?

A. About a thousand dollars as I recall.

Q. Right. So here, if it's -- I want to do this one a little differently. It should be on a per-cow basis. So if it's a hundred -- no, I'm sorry.

So on a per hundredweight basis, my number previously was $1,277. That's what it costs for $0.05 a hundredweight. So when we multiply that times five to get to $0.25 a hundredweight -- just trying to cut through the math a little bit -- that's going to get us something around $7,000 or so, correct?

A. Six to $7,000 sounds like the right number.

Q. Okay. I'm sorry, six or $7,000 per what, I'm sorry, per --

A. Per year I think is what we --

Q. Per year for -- per what --

A. For all the chemicals, the acid, the sanitizer. They are expensive.

MR. ROSENBAUM: That's all I have.

CROSS-EXAMINATION

BY MR. MILTNER:

Q. Good afternoon, Dr. Erba.

A. Good afternoon.

Q. Ryan Miltner. I represent the Select Milk Producers.

So I'd like to -- and I'll do my best not to duplicate questions here, if you'll bear with me when I pause to cross things off.

What I would like to do is start by getting some additional knowledge about some of the plants and cities that you have referenced in your testimony or otherwise are listed as distributing plants in the states that are included in Order 33.

And so I want to start with Indiana. And you mentioned a plant that was being built in the Fort Wayne area. USDA's data introduced earlier listing all the distributing plants identified that there was a plant called Blue Kingfisher d/b/a Walmart in Fort Wayne.

Is that the plant you were referring to in your testimony?

A. The Walmart plant, it was my reference, yes.

Q. Okay. Now, there's also in USDA's data a plant in Fort Wayne that is listed as a Prairie Farms plant.

Are you aware of that plant?

A. I am vaguely aware of it, but that's not the one I had in mind when I mentioned it in my testimony.

Q. Okay. Did that -- did that plant weigh particularly on any of your working group's decisions about setting the differentials for?

A. It did not.

Q. Okay. There is -- and I think these are listed alphabetically on USDA's data, which is how I input them here -- DFA d/b/a Schenkel's All Star Dairy in Huntington, Indiana.

Did that plant bear at all on specific determinations made by your working group?

A. It did not.

Q. All right. And I'll just go through the plants, and assume the question is the same so I don't have to say it every time, if that's okay with you?

A. That would be fine.

Q. Perfect.

Kroger's Crossroads Farms plant in Indianapolis?

A. They had no bearing on our discussions.

Q. Nestle's plant in Anderson, Madison County?

A. That had no bearing on our discussion.

Q. Okay. There's a plant called Ninth Avenue Foods if Bartholomew County. I'm not familiar with that plant at all.

Are you?

A. Yes. It's a relatively new plant. I'm not even sure it is processing yet. But if it is, it's barely processing.

Q. Is that a cooperative plant to your knowledge?

A. It is not.
Q. Okay. Pleasant View Dairy, which I believe is a very small dairy in Lake County, Indiana.
A. I'm not familiar with that one.
Q. Okay. Prairie Farms in Fort Wayne we mentioned.
Prairie Farms in Holland, Indiana, which is Dubois or Dubois, depending on how they pronounce it in Indiana?
A. No matter how they pronounce it, it had no bearing on our discussions.
Q. You are familiar with our fun pronunciations of Townsend, Ohio, correct?
A. I am.
Q. Okay. So you know what I'm talking about.
A. I lived in one of those.
Q. As did I. And now I live near another one in Lima or Lima or whatever.
Prairie Farms, East Side Jersey Dairy in Madison County?
A. That dairy is now closed.
Q. That is now closed.
A. That did not have any bearing on our discussion.
Q. Finally, Richmond Beverage Solutions in Wayne County.
A. I am familiar with that, and it was not part of our discussions.
Q. Okay. Do you know if that's a cooperative plant or a proprietary?
A. It wasn't, and it may have been part of a DFA

acquisition, although I'm not positive that's the same one. Smith Foods would be the owner that I'm thinking of.

Q. Okay. Moving on to Michigan.

C.F. Burger in Wayne County, Detroit?

A. I'm not even sure we mentioned that in our discussion at all, but it certainly didn't have any bearing on the discussions that we had.

Q. Is that a proprietary plant?

A. I believe it is.

Q. I think so too.

Calder Brothers Dairy in Wayne County, Michigan.

A. Remind me what the question is now other than --

Q. Yeah. The first question is did -- was that plant and any competitive issues or price alignment issues part of your working group's consideration?

A. No.

Q. Okay. And then I don't know if that's a -- do you know if that's a cooperative or proprietary plant?

A. I don't think so. I think it is proprietary.

THE COURT: Mr. Miltner, for those of us who later want to go back and look at the list, tell me again where we would find it?

MR. MILTNER: Well, you'd have -- the one I'm working off of, you would have to have my file. USDA introduced a number of exhibits on the first day of the hearing, and if you give me a moment, I'll tell you which one I pulled this data from.

You know, Your Honor, if -- well, you all want to

look at it now. I was going to say if we had a break, I would find it and give it to you then but --

THE COURT: Which is fine.

MR. MILTNER: Here we go. So Exhibits 33 and 34, are Regulated Pool Distributing Plants and Regulated Pool Supply Plants, from January 2010 through year to date, which I believe ended at March of 2023. I believe Exhibit 33 are the distributing plants that I pulled this data from, and specifically I was looking at the 2023 plants.

BY MR. MILTNER:

Q. There's a plant listed as DFA d/b/a Country Fresh in Kent County, Michigan. Now, you specifically mentioned Kent County.

Was this plant one of the issues of price alignment and competitive consideration?

A. The -- not that particular plant necessarily, but that location, yes.

Q. There's another plant in Kent County, which is a Schreiber Foods plant.

Was that plant also part of the consideration?

A. It was not mentioned specifically, no.

Q. The next is DFA d/b/a Country Fresh Jilberts, J-I-L-B-E-R-T-S, in Marquette, Michigan.

A. Yes. That was -- again, not that plant specifically, but that -- that location, that county was part of the discussion.

Q. Now, with respect to Marquette, is there any other

milk processing in Marquette or in the Upper Peninsula at all of any note besides the Country Fresh plant?

A. Not as far as I know.

Q. And do you know if the distribution from the Marquette plant remains in the Upper Peninsula or does it come down into Traverse City or that area at all?

A. It might. I know it stays in the Upper Peninsula. There may be some that ventures a little further south, but my impression was it's an island almost unto itself.

Q. Do you know if any of it moves west into Upper Wisconsin?

A. I think it does. I think it may move back that direction.

Q. The next plant is Michigan Dairy in Wayne County. Was that part of any consideration?

A. Not specifically. It wasn't mentioned by name. But we were concerned about -- that's -- you're basically talking about Detroit, and we were concerned about Detroit as a city.

Q. Do you know if that plant, Michigan Dairy, is a cooperative or proprietary plant?

A. It's a proprietary plant.

Q. Prairie Farms Dairy in Calhoun County, Battle Creek?

A. Wasn't mentioned even once by my recollection.

Q. All right. I think that takes care of Michigan. Let me get to Ohio. DFA Reiter Dairy in Springfield.

A. Was not part of the discussion.
Q. Okay. Hartzler Dairy in Wooster, Wayne County?
(Court Reporter clarification.)
MR. MILTNER: Wooster, W-O-O-S-T-E-R.
THE WITNESS: What was the name?
BY MR. MILTNER:
Q. Hartzler, H-A-R-T-Z-L-E-R, small glass bottled.
A. Yeah. So that was not part -- that plant was not part of the discussion. Wooster was something we considered, not because of that plant but from a different plant, a Class II plant.
Q. Meijer, which is M-E-I-J-E-R, in Miami County. I think you mentioned that as --
A. That's the Tipp City plant, yes.
Q. And that's owned by Meijer.
It's a cooperative-supplied plant, correct?
A. Yes. It is a grocery store chain that owns it, supplied by a cooperative.
Q. New Dairy Ohio, which I believe is a former Borden's plant in Cuyahoga County?
A. Well, we certainly didn't mention that one by name. We did Cuyahoga County as basically Cleveland, so we did talk about Cleveland as one of the basing points. But not that dairy specifically.
Q. Prairie Farms East Side Jersey Dairy in Washington County?
A. I thought you mentioned that one already, but I may have misspoke earlier. There is a East Side Jersey

Dairy in Southeast Ohio that would have closed. I thought that's what you referenced earlier.

Q. There's an East Side Jersey Dairy -- actually looks like there are several. Looks like there's one in Minnesota, which I did not mention, and there's one in Anderson, Indiana, here that I mentioned before.

A. Yeah, that's -- then I misspoke. That one wasn't one we talked about, but I don't know anything about that plant. The one in Southeast Ohio did close.

Q. Okay. Smith Foods, Wayne County, Ohio?

A. We didn't talk about that plant specifically, but Wayne County is one of the areas where there's high demand for milk, so we talked about that region, but not that plant.

Q. Superior Dairy in Stark County?

A. Yes, I mentioned that one specifically in testimony. That was the Class I plant in Northeast Ohio.

Q. And is that plant now cooperative owned?

A. It has some sort of cooperative ownership, although the exact structure, I do not know.

Q. DFA is not a partner of theirs.

A. No.

Q. Tamarack Farms, Kroger plant, in Licking County?

A. Right. So that's one of those plants right on the Columbus/Dayton/Cincinnati area that I mentioned specifically.

Q. Toft Dairy in Erie County, the beneficiaries of unregulated spot in the state?

A. Not mentioned specifically and didn't influence our discussion.

Q. And the last is United Dairy in Belmont County?

A. Not mentioned specifically and didn't influence our discussion.

Q. And United Dairy is a proprietary plant I believe, correct?

A. That is correct.

Q. And it's right on the border of West Virginia as I recall; is that right?

A. There are -- I'm going to say there's at least two and, I think, three United plants. And they're over -- they are all on the eastern side of the Mideast Area and some -- maybe outside the Mideast Area.

Q. Thanks for going through that exercise.

A. Sure.

Q. Now, on page 3 of your testimony, Exhibit 336, you mention at the bottom some plant changes that may have -- you may have taken into consideration. And you mentioned a cultured plant in Wooster, which is -- I forget which county it is, Wayne County.

And you mentioned another Class II plant in West Central Ohio. Would that the plant in Minster?

A. Yes.

Q. And what about that plant particular did the -- did your working group take into account?

A. Just the fact that it's in a location, which is going to draw a fair amount of milk, and you want to be

mindful of that because that plant will need to be serviced. And really just making sure that we didn't overlook it in terms of a demand point.

Q. Is that plant supplied by cooperatives?

A. Occasionally. Mostly has its own supply.

Q. Is it mostly supplied by a single farm about 20 miles north of the plant?

A. That would be a major supplier for that plant.

THE COURT: The spelling of that plant, please.

MR. MILTNER: Well, the city is Minster, M-I-N-S-T-E-R. And the plant is Dannon, if I didn't use that word.

THE WITNESS: Danone, I guess.

THE COURT: D-A-N-N-O-N, Danone (phonetic)?

MR. MILTNER: Well, Danone is D-A-N-O-N-E, which is a French company, and then it's branded in the U.S. as Dannon, D-A-N-N-O-N.

THE COURT: That's good. Is it data or data?

MR. MILTNER: I think I like data better, unless it's singular.

THE COURT: The young witnesses all say data. I have noticed.

MR. MILTNER: And sometimes they are talking about one piece and don't say datum. So, you know, I don't know. But we digress.

BY MR. MILTNER:

Q. I guess what were the considerations about that Dannon/Danone plant and the milk demand -- or the milk

needs of that plant given that for the most part it's not pooling from the milk shed?

A. To some degree it will pull from the milk shed. It does have a number of independent suppliers, and occasionally we will sell milk to them as a co-op. So it's just -- it's just something to be aware of because it is a large plant, and it is in a location which is going to perhaps influence which way milk flows.

Q. I'm guessing it pre-dates your time at DFA, but the single plant that comprises most of the supply there, before that plant opened three, four years ago, was there a different milk supply dynamic in that region that would have needed to be taken into account?

A. I think you are correct in saying that that pre-dates my time.

Q. On page 7 -- and I really don't recall if this was asked of you already. If it was, if you would indulge me with a recap of your answer.

You -- in the middle of the page you testified, "Furthermore, there was a general agreement that the Class I differential in Western Michigan should be reasonably similar to the Class I differential established for Chicago, Illinois."

Why -- why would that be an important issue of price alignment?

A. So one of the major supply points for Chicago comes from Grand Rapids, Michigan, so that's what -- that's what that was about. And I spoke to that in the

first pairing of the ten two-city pairings, Chicago and Grand Rapids.

Q. And so you are talking about the supply of packaged milk into the city of Chicago coming from the Grand Rapids area?

A. Right. So there aren't any processing -- Class I processing plants in Chicago anymore.

Q. Elaborate on this one step further if you could. If the Class I differential is meant to attract milk from the farm to the plant, and there are no plants in Chicago, why would there be a need to align those prices?

A. So you are going back about a year ago when I -- literally the first day I started with this project, and they had already been in process when I started. But the discussion was that the supply areas that provide packaged milk to Chicago should all be about the same Class I differential. And Western Michigan, Grand Rapids, was one of those areas.

Q. So as an economist, what -- I understand that's your first day, and they threw you in the deep end. But what -- as an economist, what would be the rationale for that?

A. So you're looking at -- I'm going to say it is four plants, although I'm not positive. I know if it is four different cities. It may be more plants than that. You want to try to equalize their raw product cost because they are all supplying the same market.

Q. So in Grand Rapids, in -- I forget, I think that's

Kent County, there are a number of both large and small farms within 15 miles of the city, perhaps? Is that about right?

A. There's a lot of milk close by. Yes.

Q. In Chicago, how close are farms to Cook County?

A. Oh, that, I couldn't tell you. But I don't know. I would not think that close, but probably not 15 miles.

Q. If, in fact, the milk supply is further from Chicago than it is from Grand Rapids, wouldn't the differential in Cook County logically need to be higher to theoretically attract milk to a plant there that doesn't exist?

A. Well, you may recall that the -- we discussed earlier in the cross-examination that the USDSS had the Chicago number higher than where it ended up, and that was several different parties from several different territories in the U.S. coming together and saying -- truly having a discussion, negotiation, about where that number should end up. So it got pushed down quite a bit from where it started from the USDSS results.

Q. And, in fact, the USDSS had Kent County at an average of 3.40 and Cook County at an average of 3.70?

A. Yes.

Q. Does that sound correct?

A. That sounds correct.

Q. Now, Proposal 19 proposes 3.10 for both of those counties, correct?

A. Yes.

Q. And so, again, if this is one that Mr. English or -- I guess Mr. English would have asked about it. Where the model places 3.70 on Cook County and 3.10, the divergence there of $0.60, what would -- is it -- what was the rationale for that? I mean I know you have talked about the committee that set -- made that determination before you arrived. But what was the -- did they explain to you their rationale other than, we need those two cities to be aligned?

A. That was the overriding message about Chicago and Western Michigan, is that they have got to be in close alignment. So that was -- literally that was given to me on that very first conference call.

The other piece that became clearer is that there has to be some -- there's significant price alignment issues, that if Chicago is not in a certain number -- and it turns out that number is 3.10 -- we have all kinds of problems with trying to get the rest of the areas to align with our price surface.

So some of the points, even the anchor points, had to be a little bit flexible in terms of what those numbers looked like, and that was one of them.

Q. Okay. If we look at your -- now, we have already talked about Marquette, so we'll skip over that.

Your third is Grand Rapids -- is on page 8 of your testimony, and you're talking about Grand Rapids and Elkhart, Indiana.

Is there a reason you chose Elkhart, Indiana,

specifically?

A. I would say the main reason is that's a big area for milk supply. I don't know that we picked it for any other reason other than we're all pretty familiar with that.

Q. So in that instance it was based more on the milk supply rather than on the milk -- packaged milk sales?

A. Right. So a lot of our discussion was what does it take to move milk from an area of supply to an area of demand, and this is one of those supply points rather than a demand point.

Q. And just to point out what I hope is obvious, that's a different consideration than the one that your working group went through with respect to Chicago and Grand Rapids?

A. Yes.

Q. And we can look at the spreadsheets if you like, but looks like the model says Elkhart would be 3.50, and we have already said Kent County, Michigan, would be 3.40. 'So there was a $0.10 gap, and Proposal 19 sets them both at 3.10, correct?

A. Yes.

Q. Putting aside that they are now aligned instead of $0.10 different, is there a reason for picking differentials that are 40 and $0.30 lower than the model?

A. Our objective was to get milk to move from areas of supply to areas of demand. And very early on in our discussions, without maybe using these exact same words,

we talked about the idea of creating a greater slope. And to do that, we had to push down some areas, lower than what USDSS would have suggested, and push some of the areas, particularly in the Southeast, higher. And that was how we created more slope.

Some of the numbers that have been talked about are a result of that overriding principle. We need to create more slope to get milk to move. In areas where we had sufficient, adequate, and maybe an abundance of milk, we were more willing to push those numbers down because we knew we had the milk there and available, and we needed a -- create a greater slope to get it to move somewhere else.

And Elkhart and Grand Rapids were two of those areas we felt we had adequate supply and no need to have a differential quite that high to create a sufficient slope to get milk to move south and east.

Q. And when you talk about the slope, were you looking for a static slope from north to south or did the gradient of the slope -- did you intend that the gradient of the slope increased or decrease at any point along the journey?

A. I would say the latter. A gradient that was maybe malleable and not something you would just set a fixed number and say, as you go south and east, this is the exact number you change by. And, again, it was all dependent on how we felt like we market milk in those areas and what the availability of milk is. And maybe one

thing we haven't talked about very much is how willing the haulers are to move that milk those distances to those locations.

Q. Did you want to comment on the willingness of the haulers at all since you brought it up?

A. Sure. So a fair amount of what happens in the Mideast, particularly as you move to the south and to the east, I spoke to this a little bit in my testimony, is the willingness of haulers to make those kinds of moves. Some haulers like to stay short, rather have short runs, shorter mileages, maybe we can double trip. And some of them prefer to go long because they have got the equipment, they have got the manpower. And it depends. And we don't always get the haulers that we need to move milk in the right areas.

So part of the exercise was how do we encourage that milk to move given the constraints we got, including the haulers that we have got.

Q. Would any of those factors you just discussed be included in the USDSS?

A. Not the way I have described them, no.

Q. Okay.

A. The USDSS would assume that the hauler can go any distance, basically, at whatever those rates are that are incorporated into the model.

Q. Would -- if there are certain routes that demand higher compensation to the hauler because of the considerations you have laid out, would those be

encompassed in the USDSS model?

A. They would not.

Q. So did your working group or the larger committee, when thinking about the slope, have any type of numerical or empirical basis for establishing that slope?

A. Other than to say -- I don't know what the other groups did, so I'll confess to that right upfront. In the Mideast we, again, talked about what kind of price differential would we need to move from one area to another. And we did that for that ten two-city pairing. That really helped us think through this a lot. So we didn't necessarily have to think about, how do you move milk from Grand Rapids into say New Wilmington or any of those places. We talked about those ten two-city pairings, and that really helped us get a better visual of what kind of milk -- what kind of price it would take to get that milk to move.

Q. So if we look at those pairings, and I'll start with Grand Rapids and Marquette, there's a 405-mile over-the-road distance between those two points, and Proposal 19 has a delta of $0.50 to cover that 405 miles. Now, the distance between Grand -- your first pairing, Grand Rapids and Chicago, is 184 miles, and there's no price delta.

So when you said you were looking at the pairings, am I correct to assume that it wasn't boiled down to a numerical slope, it was more of a practical consideration?

A. I think that's accurate. I mean, there's some

degree of this that's going to be quantitative. But, you know, in the case of that second pairing with Grand Rapids and Marquette, we knew that milk wasn't going to move. We don't intend for it to move. But there should be some kind of a variation there that says the milk in Grand Rapids has more value to it just because of its proximity to people and to plants than the Marquette milk would.

Q. Now, if I look at the third and fourth pairings, Grand Rapids to Elkhart, and then Elkhart to Indianapolis, Grand Rapids to Elkhart, about 160 miles with no delta, and Elkhart to Indianapolis, also 160 miles but a $0.60 delta?

A. I think Grand Rapids to Elkhart is just 100 miles, not 160.

Q. You are correct. My apologies. So 100 miles with no delta and 160 miles with a $0.60 delta, what accounts for that difference, or, again, is it more a practical consideration based on the working group's experience?

A. I think it is both in this case. We have got two areas, Grand Rapids and Elkhart, where we have got, I would call it adequate, if not surplus milk supplies. There really doesn't need to be a differential there -- difference between the differentials there.

When we look at Elkhart and Indianapolis, you have got a sizeable number of miles, but more -- most importantly, you don't really have a good milk supply around Indianapolis, and you need to draw that milk in somehow. There's obviously a lot of population, and we

knew we had a lot of plants in and around the area. And that's what -- that's what explains that difference, the $0.60.

THE COURT: Mr. Miltner?

MR. MILTNER: Yes, Your Honor.

THE COURT: I want to take a ten-minute break, and when we come back, I want to know whether we should interrupt the examination of this witness to be sure we get Mr. Covington on and off the stand today. So I'll hear from you after the break.

But let's take a ten-minute break now. Please be back, ready to go at 3:28. We go off record at 3:17 p.m.

(Whereupon, a break was taken.)

THE COURT: Let's go back on record. We're back on record at 3:31.

Mr. Miltner, thank you, and you may resume.

MR. MILTNER: All right. Thank you, Your Honor.

BY MR. MILTNER:

Q. So, Dr. Erba, you're -- I'm looking now at page 10 -- I guess it starts on the bottom of page 9, and you have three -- really it starts with your fifth, but I'm really looking at your sixth, seventh, and eighth city pairings, which all involve Columbus, Ohio, Franklin County.

And without looking specifically at the numbers in those pairings, what is the dynamic of milk supply and milk demand around Central Ohio that your working group was concerned with, or considering perhaps?

A. There is not much milk around Columbus. There are aren't a lot of direct routes into Columbus other than I-71. Where the milk is, how you get it to Columbus is sometimes challenging. Plus we have the -- what I mentioned earlier, the issue with the haulers, do they want to go that direction, and how much would they charge to get there.

Q. Was it the committee's experience that haulers do not want to haul to Central Ohio?

A. I would say the -- it's not a preferred location. How about that?

Q. Okay. And you'd agree that there are no fluid plants actually in Franklin County itself, correct?

A. As far as I know, that's correct.

Q. We have the same understanding.

Would the plant Tamarack Farms in Newark, Ohio, be the closest to Franklin County?

A. Yes.

Q. And that is south -- slightly southeast of Columbus, correct?

A. I thought it was northeast, but it's Licking County is --

Q. Okay.

A. -- the county.

Q. So where would the milk --

THE COURT: What is the county?

MR. MILTNER: Licking.

THE WITNESS: Licking. L-I-C-K-I-N-G.

THE COURT: That's what I thought you said.

MR. MILTNER: Welcome to Ohio.

BY MR. MILTNER:

Q. Without regard for contractual arrangements, what would be the closest milk supply to that -- to that plant?

A. It would probably come from Western Ohio.

Q. From Western Ohio?

A. Right.

Q. Around the Bowling Green/Van Wert area, or more the Auglaize/Mercer County area?

A. It may be a little bit further south than Van Wert.

Q. Okay. So closer to the -- where that large Class II plant is?

A. Correct.

Q. Okay. And so -- so when you are looking now at your sixth pairing of Columbus and Cleveland, and Cleveland, of course, is north of Columbus, there are a couple of bottling plants in Cleveland -- Cuyahoga County, which is Cleveland, in that area, correct?

A. Yes.

Q. Now, where would the milk supply for those plants naturally come from without regard for whatever contractual arrangements might exist?

A. That gets tricky because that -- south of there is going to be a fairly large pull from a lot of small- to medium-sized cheese plants, so that's -- the milk's probably not going to want to travel north. So what we

have ended up doing is bringing milk from the west and sometimes from Michigan, down that I-90 corridor, which I spoke to in my testimony.

Q. And so would you be attracting milk to Cleveland from the West and also attracting milk to Columbus from the West?

A. I think that's -- that's fair. They are not going to be the same location. Cleveland's probably coming from more like Michigan, you know, Northwest Ohio, and I would say the Columbus is coming from milk that's in a different milk shed than that, further south, but Western Ohio.

Q. Both at about the same latitude, both about 120 miles to the west, correct?

A. I think that is probably close. Our pocket of milk tends to be up in that Northwest Ohio, Northern Indiana, and certainly Michigan. And we -- we do a little bit worse the further you get south.

Q. And so explain then, if you could, the committee's consideration or your working group's consideration in adjusting the USDSS numbers for Cuyahoga County and Franklin County when they are attracting milk, not relative to each other but from pools, separate pools, equidistant to the west?

A. Right. And it just has to do with the willingness of haulers to move and the ease of which they can move on the roadways that are there. It's quite a bit easier to get into Cleveland, even though the miles may be significant. A little bit more difficult to get into

Columbus, even though the milk supply may be, as you said, about equidistant. It is not the same easy miles. It's not an interstate, and the haulers aren't as willing to go there.

Q. And then so your seventh pairing you're looking at Columbus again, but now Sharpsville, Pennsylvania.

And, again, we might be replowing ground again, but Sharpsville, where is the milk supply for that area coming from?

A. Sharpsville -- well, I can say Western Pennsylvania, which would include Sharpsville and Wilmington, the cheese plant that's out there. There's a local milk supply. It's not near enough to satisfy either one of those plants, let alone both of them. So it's got to come from other spaces.

What we have been doing to minimize the long distance hauls out of our milk surplus areas is to stair-step milk, so pull milk out of the eastern side of Ohio and then backfill with milk that's from the supply points.

Q. When -- what are those supply points you would backfill from?

A. So that would be Northern Indiana, Northwest Ohio, and to some degree Michigan.

Q. The supplies from different -- okay, if it's -- if you are backfilling and you are pulling from Ohio -- let's back that up.

If you are fulfilling it from Ohio and backfilling

that, that milk is not flowing through Franklin County, it is more flowing along the northern part of the state through Cuyahoga County and Cleveland, correct?

A. Right. So I mentioned this earlier, and maybe it wasn't clear. I'll say it again. When we looked at the ten two-city pairings, we aren't necessarily moving milk between those cities. So we're not talking about moving milk from Columbus to Sharpsville. That's just two points that we picked out to start trying to structure the zones for the Mideast Area. We aren't necessarily moving milk that direction.

Q. And was it then those two cities more than to confirm the slope between those two points as you built the whole -- whole map out?

A. Right. It's, again, to build up those zones and to figure out where those lines should lay.

Q. Now, if I take your sixth and your seventh pairings and I -- I really just look now at Cuyahoga County, Cleveland, to Sharpsville, Pennsylvania, that's a $0.10 difference between those two points, and that's about 100 miles as well, correct?

A. I think that's correct.

Q. You were -- no, I don't think that's correct. I think the model showed -- Proposal 19 for Cuyahoga County is a $3.70 differential, and Sharpsville is $4, so it's $0.30, correct?

A. I'll talk what you represent as accurate because I don't have that information in front of me.

Q. Well, I guess my question is, if the milk that comes to Sharpsville is, in fact, coming more along that northern part of the state, in looking at these data points, did you -- did the committee go back and confirm that the actual route milk travels, that that actual slope is sufficient?

A. We didn't look at it that way.

Q. Okay. And then I wanted to look at the ninth and the tenth pairings.

First is Cincinnati to Winchester, Kentucky. And there aren't really any Class I plants around Cincinnati, correct?

A. That's correct.

Q. And there is in Winchester, Kentucky, correct?

A. Yes.

Q. So the milk that's supplying Winchester, Kentucky, can you explain for us where the milk shed for that plant might be?

A. Well, there's obviously going to be some Kentucky milk that moves in there as much as we can, unless we prefer to local supply, but it's a fairly large plant, and obviously we don't have enough milk in that part of the state to supply that plant, so it's got to come from the north. Sometimes it comes from Ohio. Sometimes it comes from Eastern Indiana. It might even come down from Michigan from time to time.

Q. Because between Winchester, Kentucky, and Cincinnati, there really isn't a lot of milk production,

is there?

A. No, there is not.

Q. And if you look north from Cincinnati, you really need to move probably 75 to 90 miles north, yet, before you find any significant milk production, correct?

A. Yeah. You might be better off moving west than moving north.

Q. Now, if you look at the tenth pairing between Cincinnati and Charleston, West Virginia, when we look at Charleston, in that area, where would that milk be pulled from?

A. That's becoming trickier and trickier to supply. So you are going to go back to -- I'm going to call it the East Central part of Ohio, and pull that milk from there, and then backfill it with milk from further west. But that is becoming a very difficult market to supply. It's so much further from where our true milk surplus is, and it's a great distance from anywhere we have got milk to where those demand points are.

Q. And really, if you're pulling from East Central Ohio, would that be -- would that be the Holmes County area you are thinking, or south of there?

A. It would be that plus south of there.

Q. And so those tend to be smaller farms and --

A. Yes.

Q. -- sometimes Amish or Mennonite?

A. Yes.

Q. But -- and a generally dwindling supply --

A. Yes.
Q. -- comparatively?
A. Yes.
Q. Now, the slope between Hamilton County and Charleston, I'm not going to try to pronounce the county, is $0.70. And it's about 200 miles between those points.

I think it would be about 210 miles or more to that East Central Ohio milk shed you referenced. Does that seem about right?
A. Yeah, that's probably about right. I'd call it ballpark.
Q. I think in Mr. Sims' testimony he analyzed milk shipments across Texas, and the hauling rate in there was about a penny a mile. So $1 hundredweight to move 100 miles.

If that is about a reasonable haul rate, is that $0.70 in West Virginia sufficient to cover the cost to move the milk from the areas around Hamilton or Franklin County?
A. It probably is not. And I would suggest that what Mr. Sims covered and what Steve Zalar covered in his testimony about $1 a hundredweight per 100 miles applies to what I would call kind of a standard route. This is not a standard route. And for the most part, we are trying desperately to hold on to reasonable hauling rates, but they are getting away from us significantly in that area. So $0.70 is probably not near enough to cover that rate -- or that cost.

Q. And I note that the USDSS for Charleston had a 4.70 differential, which is the same as Proposal 19; is that correct?

A. Yes.

Q. So my question is, if -- if your working group took the model and then looked to adjust these counties that we have went through for competitive issues and price alignment and making sure the slope was sufficient, why did they not look for a higher rate in West Virginia to make sure that there was enough of an incentive to get the milk to that plant?

A. Well, ideally we would ask for every single bit of extra rate we could get, but there comes a point where you have got to match up with somebody else. And this is one of those points that's on the very fringe of the Mideast Area where we had to match up with somebody else, and that 4.70 was deemed to be a good number for them, so we acquiesced to it. And it was also an anchor point number that we couldn't feel -- we didn't feel like we had enough of a reason to adjust it from where it was, and we couldn't go up that much higher anyway. We were just going to be short when it comes to moving that milk that direction. That's the simple, sad story of it.

Q. If you are still going to end up short supplying that plant, why would a cooperative sell its members' milk at a loss if there was another higher return market?

A. We may not be doing that in the future. That's something we're going to have to evaluate going forward.

Q. On page 14 of your testimony you're talking about some of the changes to the Pittsburgh area. I wanted to ask a question about a statement that's toward the bottom third of the page.

And actually, I apologize, you are now back to talking about Ohio.

And your statement reads: "There are several plants within a relatively small geography that are likely competing for the same business around Columbus, Dayton, and Cincinnati. The solution to equalize raw product cost was to move Clark County, Ohio, to the $3.70 per hundredweight zone."

Now, does the USDSS take into account competition among Class I plants for retail sales?

A. I wouldn't say it does that, no.

Q. And so if the USDSS is supposed to be the foundation of the differentials, why is it proper to take into account the competition among processors for their customers to set dairy farmer prices?

A. We go back to look at -- we tried to do this to the best extent we could to equalize raw product costs for plants producing similar products and competing in similar markets. And I believe that is actually the direction of USDA. I can't say -- I can't point you to anything that says that absolutely has to be adhered to. But we certainly tried to do that to make sure that we weren't ending up with some very strange looking minimum costs, minimum prices to processors who are competing in the same

market.

Q. Clark County, Ohio, and Miami County, Ohio, 60 miles apart, perhaps?

A. I'm not sure. I know that they are relatively close.

Q. Okay. But the -- your working group's conclusion was that $0.30 in that -- among that group of four counties caused -- caused competitive issues for the sales of bottled product by Class I handlers, right?

A. I think there's two things here. I would agree with what you just said. Plus Clark County was one of those counties that was right on the fringe of one zone to the next zone, and where you draw that line becomes a little bit of a guessing game, to say, how should this county fall, which direction should the line fall on.

If we follow what we -- I can't swear to this, but I think the USDSS results is you end up with a county that's probably in an area it shouldn't be, and it has to do with those competitive issues. So we brought it back into alignment with the other plants that we think compete with that same business in that Cincinnati, Dayton, Columbus area.

Q. Now I wanted to ask some questions about page 18 of your statement. You quote some language from one of the order reform decisions, and it refers to $1.60 per hundredweight in the base zone.

Do you agree that $1.60 is a base level for the differentials?

A. I would say at that time it was. For that decision, it was.

Q. Okay. Now, in your sentence preceding that, you refer to "an appropriate minimum value for Class I differentials should be $1.60 per hundredweight."

In your mind, is there a difference between a base differential and an appropriate minimum value of a differential?

A. Yes. In my mind, there is.

Q. Okay. What is that difference to you, Dr. Erba?

A. $1.60 base differential would be a number that's added to all pricing points. It's a $1.60 wedge, which is not the same thing as the lowest price shall be $1.60.

Q. Under the differentials that we have today, is it your understanding that $1.60 is a minimum value or a base differential?

A. It's a minimum value for sure. The way it's been discussed is a base differential is -- it almost makes the two interchangeable, but in my mind they are not.

Q. Okay. Well, I appreciate your drawing the distinction between whether those terms are interchangeable or not.

On page 18 you then break down three pieces of the base Class I differential. Actually you refer to it as such in the previous sentence. So the cost -- the maintenance cost for a Grade A license, the cost of balancing for Class I plants, and the incentives to encourage deliveries to Class I plants, are you -- you are

describing those as a build-up to a base Class I differential; is that correct?

A. I was trying to be consistent with the language that was used by USDA at the time they made that decision.

Q. Okay. So put aside your intention to be consistent now.

And is that $1.60 a base differential or is that a -- an appropriate minimum value for a differential?

A. For that time?

Q. If you'd like to answer it that way, sure.

A. For that time, it was described as a base differential. It also happened to be the minimum. So they were, again, used interchangeably.

Q. Without respect for what those values might be today, are those three costs that are still realities for producers and cooperatives?

A. I would say so, yes.

Q. Do you think any of those -- any of those values have decreased in the last 24 years?

A. I don't think we have got great data to describe what balancing costs are. But certainly the piece that I worked on most intently with the Grade A piece, maintenance cost has not gone down, it's gone up, significant ly. I have no reason to think those other costs would go down, but I don't know that.

Q. Whatever the cost of balancing is, the cooperative still incurs it, correct?

A. Yes.

Q. And whatever the monetary incentive is to encourage deliveries to Class I plants, whatever that may be, it exists somewhere at some number, correct?
A. Yes.
Q. And your testimony is that the maintenance cost for a Grade A license exceeds $2, correct?
A. No. I don't think that's what I said.
Q. Okay.
A. I said in the example that I used with a 100-cow dairy farm, the maintenance cost was $1.46 per hundredweight.
Q. And so your reference to the depreciation costs we should ignore?
A. That was not something I would have included. That's a non-cash cost, and I was looking strictly at what are the cash costs.
Q. Okay. So the cash cost is $1.41?
A. Six.
Q. $1.46.
Do you think that the combination of balancing and incentives to encourage deliveries to Class I plants is any lower than $0.14?
A. I do not think it's lower than $0.14.
Q. Do you think it is lower than $0.74?
A. No. I do not think it's lower than $0.74.
Q. And you understand that the USDSS includes $1.60 base differential? And I intentionally say "base" and not "minimum value."

A. They include $1.60 base differential because we asked for it to be $1.60.

Q. Right. So you could take the results from the model and rip out $1.60, and that actually gives you the model output?

A. Right. The model output is -- has a wedge of $1.60 that we specifically asked to be put in there.

Q. Would it be appropriate to take that base out -- that output from the model that excludes the $1.60 and add on whatever the costs of those three line items are -- the cost of balancing, the cost of maintaining a Grade A permit, and the cost of incentivizing movements of Class I milk -- to achieve a proper differential at the county level?

A. As you described it, no, I would not say so. We went through a number of -- a number of meetings in subgroups to talk about why those numbers from the output of the USDSS don't necessarily apply as we see them. So unless you wanted to start at a $2.20 base instead of $1.60 and redo the entire exercise, I would say that's not appropriate.

Q. What are the reasons that your group talked about? You mentioned that there were reasons. What are they?

A. Ask me again, please?

Q. What are the reasons that it would be inappropriate to take $2.20 and add it to the model output as I described?

A. Well, as we have talked about at some length

today, and previous witnesses, there are a number of milk marketing challenges that are not reflected in the model, and we don't think those are -- should be ignored. They have value. And we did that across the country with local experts. And although I suppose there is -- there is a way to say you could use a $2.20 base and use the USDSS model output and say, that's your Class I differentials, I would say that that would be fraught with some problems because it doesn't take into account some of the local conditions that we know exist.

So I think that answers your question.

Q. I think it does, but it also begs this one, which is, if you are not going to take whatever the value of these inherent expenses and costs are that make up a base and add that to the model's output, then you have to discount the validity of one of those or the other, and which one do you discount?

A. I would suggest there's more than one way to get to a final product. And what we try to do is say, if you would like to go down the path of the -- I'm going to call it the three-factor formula that sums up to $1.60 and update those costs, you could do it that way.

I think Mr. Sims presented a different way of looking at it that says, how do we prevent price inversions? That is a different way of looking at it.

So there's more than one way to get there.

Q. Do you believe that establishing the differential based on the goal of eliminating price inversions is an

economically sound method for arriving at the differentials?

A. I think it's worth discussion, yes.

Q. Should it be a -- should that be a factor that USDA relies upon to set the differentials?

A. I think they should consider what Mr. Sims put into the hearing record. I think it has validity, and I think it shows an innovative way of looking at how Class I differentials are set and what the objectives are for having Class I differentials and minimum prices altogether.

Q. Do you have a copy of Exhibit 340 up there with you?

A. I do.

Q. Don't take it out. I won't ask you any questions about it.

A. Okay.

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

THE WITNESS: I thought there were no trick questions here, Mr. Miltner.

THE COURT: Oh, dear.

MR. ENGLISH: No charts, Your Honor.

CROSS-EXAMINATION

BY MR. ENGLISH:

Q. Chip English for the Milk Innovation Group, and some questions that really are follow-on from Mr. Miltner. And not very many.

So I started going there, and then Mr. Miltner

went there in greater detail, and this is the discussion about Grand Rapids and Chicago and this question about negotiation. If Chicago had not -- if the group doing Chicago had not come back and insisted Chicago needed to go down, was your group prepared to leave Grand Rapids at 3.40?

A. No. I think we would have come down anyway. Having to be in some kind of relationship with Chicago was just another constraint we had to be mindful of. But our objective was still the same, and that was to create a greater slope in the Mideast Area, and the way we would do that is to press down some of those higher differentials that would be seen in there as a surplus, which would be in -- largely in Michigan, but certainly around Grand Rapids. So we may not have gotten to the exact same number, but we qualitatively would have done the same thing.

Q. And do you know whether the group that came up with that number for Chicago similarly pressed down the numbers to the north of Chicago where the milk is plentiful?

A. As much as I hate to punt to somebody else, I don't like that, I really have no expertise in that area, and I know we have got other witnesses who can speak much more clearly to what happened west of Chicago.

Q. So on page 13 of your testimony, you refer to the compromises.

So what kind of compromises were there made with

respect to groups outside the Mideast?

A. Well, fortunately, in our cases, we were very close on every place there was a touchpoint with another area. We weren't off by more than 5, 10, $0.15. So it was a compromise to say, we've got to get to a number that agrees, what is that number going to be. It wasn't like we were off by dollars and had to come up with something really drastic. We were already pretty close.

Q. So going back to my sort of initial set of questions, what principles were applied when you had to compromise?

A. Well, I guess when you come down to the compromise in the sense that I'm talking about, you have to have an area that lines up, has a significant high degree of price alignment with the contiguous area that's next to you. And keep in mind, we worked in separate groups. We didn't really share very much until we got together and said, we're done, show us your cards, and we'll show you our cards. And that compromise was, okay, how do we get these things to match up. In our case, it was pretty easy, we were already pretty close.

MR. ENGLISH: I have no further questions. Thank you.

THE COURT: Mr. English, thank you.

Is there additional cross-examination of Dr. Erba before I call on the Agricultural Marketing Service?

I see none. I ask the Agricultural Marketing Service to ask their questions of Dr. Erba.

CROSS-EXAMINATION

BY MS. TAYLOR:

Q. Good afternoon.

A. Good afternoon.

Q. Thanks for coming to testify.

A. Thanks for having me.

Q. I'm going to try to make my way through my sticky notes, and most of them are just notes to myself, not actually questions for you, I think, at this point. So should be short.

I did have a question on page 3, going into page 4. Here you are talking about the recent addition of the large cheese plant in Michigan. And I wondered if you could provide a little more context to how that has impacted the supply in that area and, therefore, available supplies to other areas.

A. I wouldn't say it has affected the supply so much as it affected the demand. So previous to that plant, we -- DFA -- were hauling a lot of milk out of that eastern side of Michigan, particularly out of the thumb. We have a lot of members who are in the thumb of Michigan. There isn't a good location for that milk to go nearby. So that milk was routinely leaving the state. Very expensive and difficult to get haulers who wanted to make that move.

The large cheese plant has been extremely helpful in being able to manage that supply. So that plant takes 8 million pounds a day of Michigan milk, a large part of

that is DFA milk. Some of it is supplied by Michigan Milk Producers Association. And it has drastically changed what those hauling costs look like for DFA and our members in Michigan just by its location.

Q. And so does most of that milk stay up there in that plant or some of that milk does need to move south and east?

A. We still have milk that needs to leave the state. It's a very good place, Michigan, particularly the eastern side, to make milk, and a lot of the expansions that we are experiencing as DFA are occurring in the eastern side of the state. So for a time, the milk flow out of the state was reduced significantly. But as milk production continues to grow, they are starting to run into a little bit of the same problem we had previously, that milk has got to move to the west and to the south, typically leaving the state.

Q. And in Michigan you have proposed kind of more -- it used to be all the same, a flat slope. So now it is more of a slope to help move that milk out where it would need to go?

A. Right. So we put a little more dimension to it by pressing down the northern part of Michigan and raising the southern part.

Q. Okay. I want to turn to page 7, in the middle, that's when you start talking about the anchor cities and what you did from there.

And I'm not sure I asked Mr. Sims this question,

so I'll ask you. For those 19 anchor cities, or the ones that were applicable in your market, did you generally change those at all or you -- I know for Charleston, for example, that 4.50 was what the model average was, I believe, and so that you guys -- you guys kept that, you didn't try to change that. But were there any that you did try to change or need to change to make everything work?

A. Yes. So for the most part, we tried to keep those anchor city numbers what they were. And I think it was 4.70 in Charleston is what we had, and we kept that the same, and Verona we kept the same.

The one we did change was Sharpsville, and we reduced that by $0.20 in the final output. But, again, this -- that was along that eastern fringe. We wanted to make sure we matched up well with the Northeast and the Southeast.

Q. Okay. And I have a question on Sharpsville in a minute.

And I take it what I have heard today is that when you did make changes to say that Sharpsville location or any of the model output locations, you didn't necessarily do a transportation cost analysis, like what was done when we changed the Southeast differentials, but you looked at kind of what's the slope need to look like to move this milk, and based on the experience that the people in the room had on how to move milk, you kind of used that knowledge to say, we need more here, or we can do less

here.

Is that an accurate description?

A. I would say that's pretty accurate. And it was a little more involved than what you just described, but it basically went along those lines. It was not quantitatively intensive. It was more like, what kind of increase do we think we need here to draw milk to this area.

Q. And those increases don't necessarily mean it's going to cover all the actual hauling costs that you experience?

A. That is absolutely true. And, in fact, along those eastern and southern fringes of the Mideast Area, we have hauling costs that are 50, 60, 70% higher than they are anywhere else. And it is because we have one choice of hauler, who probably would like to retire, who says, if you want me to stay in business, this is what it's going to cost you. It's -- it has nothing to do with a -- any kind of formula you could come up with. And it's significantly higher than it was even five years ago.

Q. Okay. I want to turn to page 8, and that's when you first discuss the city pairs. And I'll start with the first one, which is Chicago to Grand Rapids.

In the middle of that paragraph, you say, "To maintain Class I value continuity, the Class I differentials in Chicago should be aligned with the prices at these other locations supplying packaged milk to Chicago."

I'm just wondering, I think this might have been touched on, but I want to make sure I understand what you mean by maintaining "Class I value continuity."

A. So, again, if you think about the price surface, we didn't want to necessarily create something that looked like a mountain peak, a local high in the middle of nowhere, or a crater in the middle of nowhere. And that's the part we were trying to be mindful of, to make sure this is continuous and explainable without some very large deviation from that.

Q. And that speaks to I think you talked before about the different supply areas around Chicago. So you had to lower Chicago just to make kind of it all look similar?

A. Yeah. So that was, again, one of the cities that we had several iterations to go through to say, what does that number need to look like? And it was a little bit of a challenge because there isn't any Class I plant there that's operating, but we know it's supplied by several different areas, and we want to make sure they are pretty much all in the same footing. And I think we succeeded doing that.

Q. Okay. On the Sharpsville plant, when you talk about it on page 10, you're comparing it -- the pairing was Columbus to Sharpsville, and you are trying to get the milk to move there instead of going to the local cheese plant, I take it from what your statement says.

I was just wondering if you could expand a little bit on the dynamics in that area.

A. Yeah. It's a real challenge out in the western side of Pennsylvania. There's somewhat of a local supply, but it is diminishing. Those farms tend to be small, difficult to get to, hauling-wise. Those plants are fairly large. They are, I'm going to just take a wild guess, 2 to 3 million pounds a day intake for both those plants, and that kind of milk does not lie anywhere close to that area.

So milk has got to move from outside the area. It's not going to come from the south. It's not going to come from the north. It's got to come from the west.

And what we have been able to do -- and, again, with a nod and recognition to our haulers of what they have to go through, instead of trying to pull milk all the way down from Michigan and get it into Sharpsville, which would be pretty difficult, tried to do what I talked about, and that is stair-step the milk to bring it in from Eastern Ohio, or maybe even Western Ohio these days, to fulfill those needs and then backfill with milk out of the more surplus areas like Michigan.

Q. Okay. I wanted to go to -- it was in your testimony. Let me find it. Page 22. And it is a carryover from page 21 when you are talking about regulatory inspections to ensure Grade A standards?

A. Yes.

Q. I know you listed it here it's a Market Administrator fee.

And I guess my question is, do you know if Grade A

status is federally regulated or regulated by the states?

A. The states, as I understand it, at least in our area, adopted the federal standards, the Food and Drug Administration standards. So they are state run, but they are basically the federal standards.

Q. And do you know who is -- who does those inspections, though, if it's state regulations?

A. You are sort of hinting at the state and not federal, and I probably would agree with that, yes.

Q. Okay. I just want to make sure everyone makes their arguments later based on the correct facts.

A. Got it.

Q. Yeah.

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

THE WITNESS: Thank you.

REDIRECT EXAMINATION

BY MS. HANCOCK:

Q. Okay. Good afternoon, Dr. Erba.

A. Good afternoon.

Q. I want to just ask a few questions to make sure I have it clear on the record.

When did you join the National Milk task force and start working on Class I price surface?

A. September 2022.

Q. Okay. So that -- that initial model that came from Dr. Nicholson had already been generated, and that was the first draft that when you stepped in you started working on; is that right?

A. As I recollect, when I stepped in, we had the very first model run to look at, that's correct.

Q. Okay. Did you have any conversations with Dr. Nicholson when you were on the task force?

A. At anytime?

Q. Yeah. Just about the process of what you were going through?

A. I am sure I talked to him at some point, but we talk about a lot of things, so it may not have been related to this at all.

Q. Okay. And at some point, you -- Dr. Nicholson was asked by National Milk to rerun or to run again the model that generated another set of results?

A. Yes.

Q. And did you participate in the guidance that was given to Dr. Nicholson in order to have him run an updated model?

A. Right. So we -- I limited my conversations in that process, and not directly with him, but with our group, on the plants that are either -- had closed down already or we thought were going to close down or going to open in the Mideast Area.

Q. And did you provide him with any advice or guidance other than just factual information about plant closures or openings or locations?

A. Absolutely not.

Q. Okay. And then you took the output of the model result --

THE COURT: Wait a minute. I heard his answer.

So, your question to him was, did he provide guidance; is that right, other than just plant closures?

MS. HANCOCK: I think that's what I was asking.

THE COURT: Okay. Would you ask that again? I just want to make sure -- there were like two parts to your question, and when he said "absolutely not," I think he meant, I absolutely provided no guidance. But I just want to be sure it is clear.

MS. HANCOCK: Okay. Thank you. She'll make me have a better question.

BY MS. HANCOCK:

Q. Did you guide Dr. Nicholson in any way other than to provide him with plant closure and opening information?

A. No.

Q. Did -- and then you took the final model results.

And did you understand or did everybody understand at that time that the model results was just a starting spot?

A. We had a discussion with both doctors, Stephenson and Nicholson, and that was one of the questions that was asked in the -- it was a conference call or a Zoom meeting. That was one of the questions that was asked is, basically, is this a starting point or is this definitive? Do we have to go with these numbers? And the response back, and it was from Dr. Stephenson, said, this is the starting point, and you absolutely should treat it as such.

Q. Okay. And there's several factors in there, like transportation and movement of milk that are already contemplated by the model; is that right?

A. That is correct.

Q. Why isn't it good enough to just stop right there and use this very smart model that's been improved on for decades?

A. We have, as I have discussed in cross-examination, several areas in the Mideast Area alone which don't follow what the model suggests it probably should. And one of the big things is -- is hauling. It's hauling costs and hauling availability. And sometimes you can't get milk to move the way you want it to move. The model would say, yes, you can, and we're saying, practically, no, you can't. And if you could, it's going to cost you a lot more than what the model would suggest it should cost.

Q. So on top of that, then you also talked about layering on price relativities or price alignments.

Why is that important to take into account when you are looking at these territories and setting these price differentials?

A. I think what you really are trying to avoid is something that looks erratic and allows for essentially arbitrage where you could simply move milk around and take advantage of the regulated system. The USDSS does a really nice job of saying, no, we're not going to allow that to happen because we're going to make this a continuous price surface. And to some degree we have to

depart from that because that's not reality. The backstop of that is we don't want to create a problem where there shouldn't be a problem, and that is to start getting into areas where you could take advantage of the regulation.

So that's where some of this fine tuning has to come in and say, yes, the model basically has it right, but maybe we need to tweak a little bit here or there to make sure that we stay on the proper track with what's practical and what's reality.

Q. And you've heard some discussion from the questions -- or that was embedded in some of the questions that were asked of you about the competitive locations of various plants.

Do you recall that?

A. I think so.

Q. Okay. Did -- when you were working on your task force for National Milk and in your -- both regional and then when you gathered nationally, did you at any time ever take into account the ownership of any of the plants as a factor for price -- setting price differentials?

A. In our working group, we did not. It was simply a matter of looking at the different areas within the Mideast, knowing where the demand points were, where the supply points were, and trying to come up with a price surface that made sense without regard to any kind of plant ownership.

Q. And you just started that by a qualifier that will make every attorneys' ears perk up, which is "in our

working group, we did not."

Are you at all implying that in any other working group they did?

A. I don't think so, but I don't know because I only worked in my group.

Q. Okay. You never saw anything in the process that you were firsthand aware of that would indicate that anybody was trying to obtain any kind of competitive advantage, were you?

A. No.

Q. Okay. And you work for DFA, which has numerous plants throughout the country; is that right?

A. Yes.

Q. And so to the extent that there is a DFA plant that might be located in an area with higher differentials, how would you respond to a question or an implication that somehow that is designed to give DFA a competitive advantage?

A. We didn't look at it that way, and that would not have been one of our objectives within our working group. That was certainly not one of the things that we considered, even from the first day I participated. It was all about, what's the price surface that makes the most sense in your area that you know of.

Q. Okay. Thank you so much for your time, Dr. Erba. I appreciate it.

MS. HANCOCK: Your Honor, at this time we would move to admit Exhibits 336 through 338.

THE COURT: So I also know that I marked as Exhibit 339 a larger version of a chart that comes from Exhibit 299 from Dr. Vitaliano. And I don't know if we actually got that created, but I want to admit that as well.

MS. HANCOCK: You are right. I just didn't go far enough. I forgot we had four exhibits. So it is 336, 337, 338, and 339. Thank you.

THE COURT: Is there any objection to the admission into evidence of Exhibit 336? That's also Exhibit NMPF-38 Amended.

There is none. Exhibit 336 is admitted into evidence.

(Thereafter, Exhibit Number 336 was received into evidence.)

THE COURT: Is there any objection to the admission into evidence of Exhibit 337, also marked Exhibit NMPF-38A?

There is none. Exhibit 337 is admitted into evidence.

(Thereafter, Exhibit Number 337 was received into evidence.)

THE COURT: Is there any objection to the admission into evidence of Exhibit 338, also marked Exhibit NMPF-38B, like boy?

There is none. Exhibit 338 is admitted into evidence.

(Thereafter, Exhibit Number 338 was received

into evidence.)

THE COURT: Is there any objection to the admission into evidence of Exhibit 339, which is a larger piece of evidence that was taken out of Exhibit 299?

There is none. Exhibit 339 is admitted into evidence.

(Thereafter, Exhibit Number 339 was received into evidence.)

MR. ROSENBAUM: Steve Rosenbaum, International Dairy Foods Association.

I would like to move into evidence Hearing Exhibit 340.

THE COURT: Is there any objection to the admission into evidence of Exhibit 340?

There is none. Exhibit 340 is admitted into evidence.

(Thereafter, Exhibit Number 340 was received into evidence.)

MS. HANCOCK: Your Honor, along with that last document, we'll add this to the list of items that we'll seek judicial notice -- of which we will seek judicial notice at the end of the hearing. But just for -- so our record is clear, in conjunction with this one, that we would like the entirety of the document noticed.

THE COURT: Yes. I -- I take official notice of the entire Grade A Pasteurized Milk Ordinance, 2019 Revision, from the United States Department of Health and Human Services, Public Health Service, Food and Drug

Administration.

And then there's one other item, and that is when Dr. Erba showed us some errors that we need to correct on some Excel spreadsheets, I don't know exactly how we want to handle that because those show up in a couple of different places.

MS. HANCOCK: So, Your Honor, I believe what we will do is we'll wait until we get to the end of this section just to make sure that we don't have any other changes along the way. We will submit an amended list of the counties to have all of the correct numbers in there, and we'll submit an amended map as well, so that both will be complete. But we'll do it at the end just to make sure that there's nothing along the way.

THE COURT: Okay. And specifically, what I'm thinking about right now, is where -- let me make sure I'm in the right place. So which --

MS. HANCOCK: I believe that his testimony is correct as -- Dr. Erba's testimony is correct as it's written, but it is different than what was submitted on our county form. So the correction needs to be made to Exhibit 299, but Dr. Erba's testimony in 336 is correct.

THE COURT: All right. And I think one of them -- and, Dr. Erba, maybe you can confirm whether I'm right or not -- I'm looking at page 14 of Exhibit 336, and you were talking about Allegheny County, where Pittsburgh is located, and you mentioned that the solution was to move that to the $4.20 per hundredweight zone, and I believe

you said that the Excel spreadsheet should say $4.20 instead of $4.40.

THE WITNESS: Yes. So the Excel spreadsheet says $4.40 per hundredweight, and it should say $4.20 per hundredweight.

THE COURT: All right. And the second one was I believe you were talking about Clark County, Ohio. And your testimony on page 14 says that the solution was to move that to the $3.70 per hundredweight zone, and you mentioned that the spreadsheet still showed $4.

THE WITNESS: That is correct. So the testimony is correct; the Excel spreadsheet is in error, it needs to be corrected.

THE COURT: All right. Thank you.

And, Ms. Hancock, I appreciate your keeping track of this because, of course, those numbers show up over and over. So thank you.

MS. TAYLOR: If I could request, when you do submit the amended sheet, to also submit that in an Excel format as well as PDF. Thank you.

THE COURT: Good.

All right. Excellent. Now, where are we time-wise? Oh, good. We have time for our next witness?

And would that be Mr. Covington? He's eager. That's great.

Let's take a ten-minute break --

MS. HANCOCK: We won't have time if we do that.

THE COURT: Oh, we won't?

MS. TAYLOR: No, we won't.
THE COURT: We have to take the break.
MS. TAYLOR: We can go two ways. I would suggest -- two different ways. Take a small break and put Mr. Covington on, and I don't think he'll be done in 20 minutes. I know Ms. Keefe still has to get some documents on as clean-up, if she is ready, and she could -- I don't know what option is preferred. She could get that done now and Mr. Covington could go on first thing in the morning. I offer that as two options.
MS. HANCOCK: I think that his examination won't finish until tomorrow, so he'll be on in the morning no matter what, so I think it makes sense to do Ms. Keefe.
THE COURT: Very good. All right. You said short break. Does that mean five minutes?
MS. TAYLOR: They tell me Ms. Keefe will be less than five minutes, although I have been skeptical. So I think whatever is your preference.
THE COURT: My preference is ten minutes.
Please be back and ready to go at 4:45. We go off record at 4:35.
(Whereupon, a break was taken.)
(Thereafter, Exhibit Number 341 was marked for identification.)
THE COURT: We're on record now at 4:45.
I'd like the witness in the witness chair to state and spell your name.
THE WITNESS: My name is Sally Keefe, S-A-L-L-Y,

K-E-E-F-E, and that's F as in Frank.

MR. ENGLISH: And I'm recalling her to the stand, so she's been previously sworn, Your Honor.

THE COURT: You remain sworn.

SALLY KEEFE,

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

THE WITNESS: Thank you.

MR. ENGLISH: So, Your Honor, during the break we had a document marked as Exhibit 341, which is also marked as Exhibit MIG, for Milk Innovation Group, 5B. And it has been handed out. It is a multi-page document, which is, by the way, with one -- two changes -- or one change, each column, the same as Exhibit 112, pages 25, 26, and 27.

REDIRECT EXAMINATION

BY MR. ENGLISH:

Q. And Ms. Keefe is going to quickly explain what this document is and why she prepared it.

A. Sure.

So way back when in August when we were on milk composition, I presented a series of charts, and these three pages had just the blue and yellow bars without the number labels on them. So like for January of 2021, the blue bar was just a bar, and it didn't count the number of observations. It didn't have "19" there or "13" over the yellow part.

And so the only change between Exhibit 112, pages 25, 26, and 27, and Exhibit 341, pages 1, 2, and 3,

is just adding the labels onto the bar chart.

Q. Do you have any further information about Exhibit 341?

A. Not unless anybody has questions about Exhibit 341.

Q. So, Ms. Keefe, does -- do you have a statement to make on behalf of Milk Innovation Group about advanced pricing?

A. Yes, I do. I wanted to make sure that it was clear in the record that the Milk Innovation Group does not support the elimination of advanced pricing and does -- and, therefore, does not support the adoption of Proposals 16, 17, and 18, because each of those would eliminate advanced pricing.

MR. ENGLISH: I have no further questions for the witness. She's available for cross-examination at two minutes and 17 seconds.

THE COURT: Who would like to ask Ms. Keefe questions about the testimony she's just given us?

I would invite the Agricultural Marketing Service to ask any questions that you may have.

MS. TAYLOR: We have no questions.

MR. ENGLISH: Your Honor, I move the admission of Exhibit 341.

THE COURT: Is there any objection to Exhibit 341 being admitted into evidence?

There is none. I admit into evidence, Exhibit 341.

(Thereafter, Exhibit Number 341 was received into evidence.)

THE COURT: Ms. Keefe, you are not only brief and concise, but uncontested.

THE WITNESS: Thanks, Your Honor.

MR. ENGLISH: And under four minutes.

THE COURT: Thank you. You may step down.

It is now 4:49. How would the Agricultural Marketing Service like to proceed?

MS. TAYLOR: Your Honor, I think that's all the witnesses available today.

So I think tomorrow we'll continue with our witnesses from National Milk, and I believe Mr. Covington will be first on the witness stand. And if we finish with him, I'm not sure if we move to Mr. Vandenheuvel or Dr. Vitaliano after that. That's up to National Milk. That's who is on my list.

MS. HANCOCK: I think that's right. So we'll start with Mr. Covington. Then we'll go to Rob Vandenheuvel. If we have time, we'll go to Chris Hoeger. And then we have Dr. Vitaliano who can fill in if we have more time left.

THE COURT: Good. And as I recall we go to 5:00 p.m. tomorrow?

MS. TAYLOR: That's correct.

THE COURT: All right. Is there anything else anyone wants to put on the record before I close the record for the day?

I see nothing. We now go off record until tomorrow morning at 8:00 a.m. We go off record at 4:50 p.m.

(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: December 13, 2023

FRESNO, CALIFORNIA

MYRA A. PISH, RPR CSR
Certificate No. 11613