

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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Zionsville, Indiana

December 6, 2023

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Reported by:

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

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

FOR THE USDA ORDER FORMULATION AND ENFORCEMENT DIVISION,
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Todd Wilson
Brian Hill
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FOR THE NATIONAL MILK PRODUCERS FEDERATION:

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FOR SELECT MILK PRODUCERS, INC.:

Ryan Miltner

FOR INTERNATIONAL DAIRY FOODS ASSOCIATION:

Steve Rosenbaum

FOR THE MAINE DAIRY ASSOCIATION:

Dan Smith

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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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1 WEDNESDAY, DECEMBER 6, 2023 -- MORNING SESSION

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

3 We're back on record. It is 2023, December 6th.
4 It's Wednesday. It's day 41 of this proceeding.

5 Who would like to acquaint me with how we will
6 begin?

7 MR. ENGLISH: This is Chip English with the Milk
8 Innovation Group.

9 If I may, we have communicated this to USDA and to
10 National Milk.

11 When we went off the record last night, we were
12 asked about some of the dairy farmer witnesses, and the
13 answer is that we, having discussed with the dairy farmer
14 witnesses, are going to want National Milk to go forward
15 with Dr. Brown, Dr. Scott Brown.

16 And then the order would be, after Dr. Scott
17 Brown: Mr. Joe Carson and Joe Shockey. Joe Carson for
18 United Dairy; Joe Shockey who is a dairy farmer who ships
19 to United Dairy. Then Mr. Mike Sumners, S-U-M-N-E-R-S.
20 And then Mr. Hau from Mapleville Creamery, H-A-U.

21 It is perhaps my turn to take the optimistic
22 position, that we anticipate finishing all of those today.
23 And then in addition, if any extra time, having a flex
24 witness that I'll let Mr. Rosenbaum speak to, from IDFA.

25 But that is -- that is our intention. All of that
26 testimony was submitted overnight.

27 I will say that early this morning Mr. Sumners
28 indicated to us that he had done some modest rewriting,



1 some of it was just some typos, and we expect that to be
2 re-submitted shortly.

3 MR. ROSENBAUM: Your Honor, Steve Rosenbaum for
4 the International Dairy Foods Association.

5 Assuming the completion of the witnesses that
6 Mr. English has identified, we will be calling next Mike
7 Brown. Mr. Brown is relatively flexible, and so if we
8 don't have time to start him today, he might not be the
9 first witness tomorrow because others are less flexible,
10 but we will let everyone know today.

11 THE COURT: Thank you.

12 Are there any other preliminary matters?

13 I see none. I'm going to ask you to state and
14 spell your name.

15 THE WITNESS: My name is Scott Brown, S-C-O-T-T,
16 B-R-O-W-N.

17 THE COURT: And you are referred to as "Dr."?

18 THE WITNESS: Correct.

19 THE COURT: And in what field is your doctorate?

20 THE WITNESS: I have a Ph.D. in agricultural
21 economics.

22 THE COURT: Have you previously testified in this
23 proceeding?

24 THE WITNESS: I have not.

25 THE COURT: I'd like to swear you in.

26 //

27 //

28 //



1 SCOTT BROWN, Ph.D.,

2 Being first duly sworn, was examined and

3 testified as follows:

4 DIRECT EXAMINATION

5 BY MS. HANCOCK:

6 Q. Nicole Hancock for National Milk.

7 Good morning, Dr. Brown. Thank you for being here
8 today.

9 Would you -- before we begin talking about your
10 testimony, would you provide your business address for the
11 record?

12 A. Yes. It's 1100 University Avenue, Columbia,
13 Missouri, 65211.

14 Q. Thank you.

15 I'd like to first start off by talking about your
16 professional background. Could you start with your
17 education and then let us know what you have done in your
18 professional career.

19 A. Yeah. So I would have received a bachelor's
20 degree in agricultural business from Northwest Missouri
21 State University, and then went to the University of
22 Missouri and received both a master's degree and my Ph.D.
23 in agricultural economics.

24 Much of my professional career has been doing
25 quantitative dairy policy analysis. I have been
26 associated long-term with the Food and Agricultural Policy
27 Research Institute at the University of Missouri, where we
28 really stand ready to -- to provide Congressional ag



1 committees analysis of farm policy as they debate farm
2 bills.

3 Q. And then tell us about your professional career.
4 What have you done in your profession?

5 A. So a lot of the work that I have done, so running
6 an econometric model that analyzes livestock and dairy
7 policy, so I -- I'm broader than just dairy. But using a
8 combination of econometric model to help analyze policies,
9 and, again, spent a lot of time working with House and
10 Senate ag committee staff as they write farm policy, to
11 help them understand quantitatively what changes in policy
12 might mean to the industry. I don't go to advocate pro or
13 con for policy, really just trying to educate about what's
14 the quantitative results of the -- of potential policy
15 changes.

16 Q. And who are you employed by now?

17 A. Employed -- sorry.

18 Q. Yeah. Who is your employer?

19 A. Yeah. I am employed by the University of
20 Missouri.

21 Q. Do you have any other employment?

22 A. No.

23 Q. Do you have a separate consulting company or
24 anything like that that you work through?

25 A. So I do have an LLC, Global Ag Model, that
26 occasionally work will go through that LLC.

27 Q. And as you sit here today, who are you doing your
28 work on behalf of, which employer or which role?



1 A. So it is the University of Missouri. It was a
2 grant between National Milk Producers Federation and the
3 University of Missouri for this work.

4 Q. Okay. Are you being paid to be here today?

5 A. I am not.

6 Q. And are you here to advocate on behalf of any
7 party or any proposal or any position?

8 A. I am not. Only here just to share quantitative
9 results from some model runs that I have made.

10 Q. Okay. Similar to the role that you performed when
11 you were providing your modeling analysis for Congress
12 when they are writing policy as well?

13 A. Exactly the same role.

14 MS. HANCOCK: Okay. Your Honor, at this time we
15 would ask that Dr. Brown be recognized as an expert in
16 agricultural economics, dairy policy analysis, with a
17 specialization in econometrics modeling.

18 THE COURT: Is there any objection?

19 There is none.

20 Dr. Brown, I do accept you as an expert in
21 agricultural economics, dairy policy analysis, especially
22 with regard to econometrics modeling. Thank you. Thank
23 you.

24 THE WITNESS: Thanks.

25 BY MS. HANCOCK:

26 Q. Dr. Brown, before you move into your testimony --

27 MS. HANCOCK: And, Your Honor, we have two
28 exhibits to mark here, one being his written statement and



1 one being his presentation.

2 BY MS. HANCOCK:

3 Q. Dr. Brown, I would like to know, what is it that
4 you were asked to do before you put together your
5 testimony in your presentation?

6 A. Yeah. So it was to look at a number of options
7 that National Milk was looking at in terms of Federal
8 Order Reform. This was work that was done back in --
9 well, completed back about September of 2022. It would
10 have looked at changes in Make Allowances, changes in skim
11 milk components, move back to the higher-of in terms of
12 the Class I mover, and then changes in Class I
13 differentials.

14 Q. Okay. And so you performed your analysis on
15 behalf of National Milk, you said in September of 2022?

16 A. That is correct, before what would have been their
17 annual meeting in 2022.

18 Q. And what did you understand was the use of the
19 work product that you had provided to National Milk?

20 A. It was -- I think was to be used for them to
21 decide how they wanted to move forward. They wanted to
22 see what proposed changes they were thinking about, I
23 would -- what I would say, the impacts of those changes
24 were going to be.

25 Q. Did anybody tell you where they were hoping to go
26 with those results before you performed your analysis?

27 A. They did not.

28 Q. Did you have any kind of pre-determined outcome



1 that you were asked to achieve or any -- any kind of
2 guidance that directed the results of your study, other
3 than just the numerical inputs?

4 A. No -- yes. They gave me the assumptions that I
5 needed to run each of the scenarios, and I then delivered
6 that back to National Milk Producers Federation when I was
7 completed.

8 Q. And has anybody scrubbed or modified any of your
9 data in a way that would minimize any negative information
10 that came out of that modeling?

11 A. They did not.

12 MS. HANCOCK: Your Honor, if we could mark
13 Exhibit NMPF-60, which is Dr. Brown's written statement,
14 as the next exhibit.

15 THE COURT: I believe that would be 421.

16 (Thereafter, Exhibit Number 421 was marked
17 for identification.)

18 MS. HANCOCK: And then if we could mark the
19 PowerPoint as the next exhibit, I believe that it --
20 online it is posted as NMPF-60A. My version has NMPF-59
21 on it.

22 THE COURT: Mr. Hill?

23 MR. HILL: Yes. And it does have to be renumbered
24 for NMPF because there is an NMPF-59 already for
25 J.D. Heiskell's statement.

26 THE COURT: All right. So this will be renumbered
27 as NMPF-60A.

28 MS. HANCOCK: And we'll resubmit it so that it is



1 properly labeled for the electronic version, so our record
2 will be correct, and the online version will be corrected
3 as soon as we can make that change.

4 THE COURT: Excellent.

5 I'm going to go off record for just a moment while
6 I receive my copies of those two exhibits, and the witness
7 will also need copies, although he's going to be looking
8 at his laptop, I believe.

9 MS. HANCOCK: I think he has copies, Your Honor.

10 THE COURT: All right. Good.

11 (An off-the-record discussion took place.)

12 THE COURT: All right. I'm looking at
13 Exhibit 421, which is NMPF-60; and 422, which is NMPF-60A.

14 (Thereafter, Exhibit Number 422 was marked
15 for identification.)

16 THE COURT: You may proceed.

17 MS. HANCOCK: Thank you, Your Honor.

18 BY MS. HANCOCK:

19 Q. Dr. Brown, did you prepare Exhibit 421, your
20 written statement, in support of the analysis and the
21 conclusions that you reached for the modeling work that
22 you did for National Milk?

23 A. Yes, I did.

24 Q. Okay. And then did you also prepare Exhibit 422
25 as a PowerPoint presentation to summarize the contents of
26 your written statement and the modeling work that you did
27 in 421?

28 A. That is correct.



1 Q. And are you prepared to provide us with your
2 presentation to summarize those results?

3 A. I am.

4 Q. Okay. If you would go ahead and proceed, and then
5 we'll follow up with just a few questions.

6 A. Thank you.

7 So I want to start this morning just talking a
8 little bit about the FAPRI-MU Dairy Model, and a little
9 bit of the origins when you look back at the history of
10 FAPRI. So these were models that really came from USDA
11 back in the early 1970s. A lot of the very first
12 documentation I saw was from folks working in the Economic
13 Research Service of USDA back then.

14 My work in the dairy model really started during
15 the 1990 Farm Bill debate. I have been involved in
16 most -- in all the farm bills since the 1990 Farm Bill
17 debate. It has been used extensively as dairy policy's
18 been debated on the Farm Bill.

19 I recall one time during a Farm Bill debate
20 getting a call asking for analysis from the chief of staff
21 of one of the ag committees who relayed to me, "Scott, we
22 need you to answer the correct" -- or I shouldn't say the
23 correct -- "the direct payment program that you think
24 works best under these set of scenarios that we have put
25 together for you."

26 And my response was, "Well, how long do I have to
27 work on that analysis?"

28 And the chief of staff said, "Well, the members



1 are next door working on some other things, so you have
2 about three hours to provide that analysis," which can put
3 you in a scary situation trying to do analysis on the fly.

4 But the decision was, whatever I told them, that
5 was going to be the direct payment program that they chose
6 to use for that particular analysis. That did not become
7 final law at the end of the day, but certainly been in the
8 process of farm policy.

9 And as I look at other farm bills, I see some
10 pretty familiar language in the final text that might have
11 a fingerprint or two of mine on it.

12 I will say, FAPRI itself really started as an
13 annual appropriation from Senator Tom Eagleton back in the
14 early 1980s. I used to proudly say we were the longest
15 running agricultural earmark in the Federal Government
16 until earmarks went away. With removal of earmarks, we
17 became an authorized policy center and have received
18 funding through that authorization ever since.

19 FAPRI has certainly been recognized for its work
20 in -- in agricultural policy. In the early 1990s we would
21 have received, from The American Association of
22 Agricultural Economics, the Distinguished Policy
23 Contribution Award. We have also been recognized by USDA
24 for the work that we have done in dairy policy as well.

25 So the system that we have developed is, in many
26 ways, similar to the modeling approach used by the
27 Congressional Budget Office in that we are all trying to
28 look at the cost and expected changes of farm policy for



1 the next ten years into the future.

2 The model's had other uses as well. You know, I
3 mentioned some of the work that has been related to dairy
4 promotion that I believe Dr. Capps talked about earlier in
5 this hearing as well. So the model's received work
6 outside of Farm Bill work as well.

7 The model itself is an annual model. That is as
8 much a result of the way farm bills have been written in
9 the past in that we're looking at the cost and expected
10 impacts of those farm bills ten years into the future.
11 When you look at the individual equations, it's a mix of
12 estimated equations as well as imposed relationships. I
13 sometimes say those imposed relationships could be as
14 simple as identities that take milk cows times milk yield
15 to give us milk production, and in other cases we may have
16 imposed elasticities on the model based on what we see out
17 in the literature related to whatever equation that we're
18 working on.

19 On the supply side, it is a state-level model
20 where it's primarily driven by milk prices, as well as the
21 cost of production.

22 On the demand side, we do demand at the national
23 level. The model is a dynamic partial equilibrium model.
24 It is a combination of Excel spreadsheet and then the
25 statistical package SAS that we use to estimate and
26 simulate the model.

27 I always like to remind us that the model is a
28 simplification of the reality of the complication of the



1 dairy industry today. There's no way that I can replicate
2 all of the detail that exists in the dairy industry.

3 The dairy model's always changing. As we do
4 analysis, as we do forward-looking baselines, we're
5 looking for areas where the model could be made better,
6 and we invest our time each year doing that kind of work
7 related to making, hopefully, the model better at some
8 points in time.

9 Having done this for over three decades, it's a
10 slow process in terms of the evolution to make the model
11 better, but I've spent a lot of time thinking about the
12 pros and cons of -- of how to make changes to better
13 address some of the questions that we need.

14 I always say, I need the model to be simple enough
15 to relay to a lay audience, but at the same time, rigorous
16 enough to pass muster with my colleagues as agricultural
17 economists around the country.

18 So I spend time with these key elasticities for
19 you, just because they are very important to the results
20 that you get when you begin to run scenarios. I start
21 with the supply side, so although we do state-level supply
22 side, we're actually estimating regional dairy cow
23 equations.

24 You will see the two-letter state abbreviations on
25 the right side that tell you what states are in each of
26 those regions, but we're estimating at the regional level
27 cow numbers; we're estimating at the state level milk
28 yields.



1 I will say that when you look at the supply side,
2 cow numbers are fairly inelastic with terms of response in
3 the short run --

4 THE COURT: Now, I'm going to slow you down
5 because this information is extremely important and dense,
6 so just talk more slowly, please.

7 THE WITNESS: I will slow down.

8 THE COURT: When you said numbers of cows are
9 fairly -- it's very often difficult to tell whether the
10 speaker has said "elastic" or "inelastic." So would you
11 take it from there again, please?

12 THE WITNESS: I will. When you look at the dairy
13 cow equations, they are very inelastic. When you look at
14 a short-run elasticity, and we'll pick the southern states
15 here, short-run elasticity of .05, it says to changes in
16 milk prices or milk receipts, we get very small response
17 in the first year on terms of dairy cows. Now, those
18 equations do have lag-dependent variables in them, so the
19 longer run elasticity is larger. I would still
20 characterize it as reasonably inelastic.

21 When you look at the elasticities on the
22 right-hand side, those are production per cow elasticities
23 with respect to milk prices. Also very inelastic in the
24 case of Kentucky, in the very upper right-hand corner of
25 that block of southern states of .02. So, again, some
26 response to milk yields as prices go up in the current
27 year, but not much response longer-term.

28 When I do -- all right. So oftentimes, I'm



1 looking at who are others that are out there building
2 similar models and what do their elasticities look like?

3 USDA's Economic Research Service staff recently
4 published their own documentation of a dairy model that
5 structurally looks similar to the dairy model that I have.
6 And their cow elasticity at the U.S. level, short run, is
7 .031, to give us a point of comparison, and their
8 elasticity in terms of milk yields, .016. So very similar
9 relative to the FAPRI framework and what I see from the
10 Economic Research Service documentation.

11 The demand side elasticities are also very
12 important to the mix. Again, I will characterize the
13 products. So you see here the demand side products at the
14 national level: Butter, nonfat dry milk, American cheese,
15 other than American cheese, fluid milk. And then we have
16 other milk fat and other skim solids demand equations. If
17 I look, for example, at what we're running as an own-price
18 elasticity for fluid milk, it is a minus 0.12, also
19 relatively inelastic.

20 Income elasticities matter as well, especially
21 when we're talking about the baseline that we're doing.
22 But I'd characterize the dairy model's current version as
23 becoming more inelastic over time, as we have looked at
24 adding more observations to the estimation period. Both
25 the supply side has become more inelastic and the demand
26 side has been more inelastic.

27 We tend to estimate single equations, ordinary
28 least squares estimation. The retail equations tend to be



1 estimated in double-log format so that we can interpret
2 the parameters as the elasticities.

3 A little bit of comparison to other results. So
4 USDA's documentation from 2023, they show a fluid
5 own-price elasticity of minus .035; they show a cheese
6 price elasticity of minus .066; and a butter elasticity of
7 minus .056.

8 Let's just, as I conclude here, remind us that the
9 scenarios that I'm going to show depend critically on
10 these elasticities and will affect the magnitude of the
11 results.

12 So this work for National Milk Producers
13 Federation was, in fact, a grant agreement between NMPF
14 and the University of Missouri that was entered into in
15 mid-2022. FAPRI traditionally turns out a baseline in
16 March of each year, so long-term ten-year forward-looking
17 baseline in March of each year. We really didn't start
18 the National Milk work until about August of 2022, so we
19 did some updating to the March FAPRI baseline by taking
20 input from National Milk Producers Federation and other
21 industry stakeholders.

22 If you recall, 2022 prices for milk were much --
23 moved much higher than I think many of us would have
24 thought early in 2022, so a lot of those adjustments
25 that -- that were made had -- had to do with aligning to
26 what was a more positive beginning of 2022. We'll look a
27 little at some of the results of this baseline in the next
28 slide or two.



1 And then it's to impose these five scenarios,
2 making initial adjustments in 2023. We know we haven't
3 met the deadline to make policy -- make Federal Order
4 changes this year, but back when that work was done in
5 2022, it was actually started as a scenario beginning
6 2023.

7 Initial adjustments were made. If any of the
8 proposals talked about additional further adjustments that
9 might occur depending on the data that was available,
10 those were not incorporated. So it's just the beginning
11 changes that the parties of the proposals would have
12 talked about.

13 So I always like to remind us of the difference
14 between a baseline and forecast. If -- if I was
15 forecasting, I might not use models like this. I also
16 have learned very early on that I should not go trade in
17 futures markets based on the baselines put together by
18 FAPRI.

19 So I -- I go -- I am trying to find what I think
20 is an accurate reflection of what the future of the
21 industry looks like, but it's difficult because so many
22 things are changing as we go through time.

23 So here is the U.S. all-milk price from the
24 deterministic portion of the baseline. I always say, you
25 can see what's a long-term U.S. all-milk price that's
26 about \$19.75 per hundredweight over the period, just to
27 remind us of the changes that were made as we interacted
28 with NMPF and industry stakeholders, was really about a 25



1 to \$0.30 increase in that U.S. all-milk price at the end
2 of the day long-term. The adjustments in the short-term
3 were a little larger, just reflecting on the current
4 market situation.

5 When I -- when I talk about the baseline process
6 as well, so FAPRI goes through a very long process of
7 generating a preliminary long-term baseline that usually
8 occurs in November of each year. We then invite
9 stakeholders, primarily other economists that would run
10 models similar to this, to come in and critique, tell us
11 what they see that we didn't do well, or that they think
12 we have missed in terms of how the baseline is put
13 together.

14 So we try to take that industry and other expert
15 input into creating the final baseline that then
16 eventually gets turned out, again, usually in March of the
17 following year.

18 One of the real changes that I think is important
19 for us to talk about as we see a lot more volatility in
20 dairy markets today is I just can't do deterministic point
21 estimate analysis of some of these proposals. It matters
22 to how these different proposals affect the volatility.

23 So the line that you see in front of you, again,
24 is, thus, now stochastic. All right? So I want to take
25 500 alternative futures around the deterministic baseline
26 that would look at historical weather deviations,
27 historical changes in international demand, for example,
28 and then other things like macro factors as well, as a way



1 to talk about what is the distribution of possible
2 outcomes relative to that deterministic baseline.

3 So the line is a cumulative density function, for
4 those that want to get into statistics this morning. Some
5 of you may be much more familiar with the old bell-shaped
6 curve that comes from a probability distribution function,
7 but this is just cumulative as you go left to right. You
8 see the 500 outcomes across the horizontal axis, where you
9 see the prices on the vertical axis. I sometimes
10 summarize this graph by saying, I think milk prices will
11 be somewhere between \$15 and \$30 per hundredweight.

12 I -- I think it's important to understand that
13 there's a lot of volatility to where prices are today, and
14 we need a modeling approach that handles that volatility.
15 The problem, when we go to the stochastic approach, is how
16 to get the information out and across in a simple manner.

17 Just to give you a little bit of flavor of what
18 that means. So I was looking at roughly about 380
19 variables that we forecast out of the dairy model that we
20 have today, ten years into the future, and there are 500
21 outcomes for each year. That's 1.9 million data points.
22 There's no way I could cover 1.9 million data points, so
23 I'm going to be summarizing that information, but I want
24 you to get a sense of the breadth of what's available in
25 the modeling approach.

26 So why -- why stochastics? What really started
27 the stochastic process was, I think staff, especially ag
28 committee staff, got really good about saying, if I'm



1 going to have to do a change in policy relative to a
2 deterministic baseline, if I set the trigger just a little
3 bit below the baseline, it would have very little cost.
4 So they learned very quickly that, hey, I can kind of
5 almost game, if you will, or -- or position those changes
6 in a way that minimizes cost, because it's going to be
7 looked at relative to a deterministic baseline.

8 When we look at stochastics, we get a much wider
9 distribution, and I think that gives us a better estimate
10 of the cost of some of these proposals.

11 The tails of these distributions -- so when I say
12 "tails," if you look on the left side of this graph from 1
13 to 51, so the first 10% of outcomes, what that tail looks
14 like matters immensely to some of the information that we
15 get out, as well as the tail on the right-hand side. If
16 they're normally distributed, which this one probably
17 looks fairly normally distributed, then may be less of a
18 problem. But when you think about it from a cost
19 standpoint, sometimes the cost side of this is not
20 normally distributed when you look at the end.

21 So I'm going to give you a flavor of the proposals
22 that I looked at for National Milk, and in no particular
23 order. So I looked at each of the first five of these
24 individually, and then combined them altogether.

25 You know, number one was an increase in
26 Make Allowances --

27 THE COURT: I'm going to interrupt you just a
28 moment. So the people who may be looking at the



1 transcript in the future will have an idea that we're now
2 on page 9 of Exhibit 422.

3 And you may proceed.

4 THE WITNESS: Thank you.

5 So -- so the first proposal here was to increase
6 Make Allowances. You see the butter Make Allowance of
7 \$0.21, as well for nonfat dry milk for cheese \$0.24, and
8 then for dry whey 23, so Proposal 7.

9 Number two for my analysis was what happens if we
10 discontinue the use of barrel cheese and the protein
11 component price formula.

12 Option three for me was the return to the
13 higher-of the Class I skim price mover, so Proposal 13,
14 which again, I will say that's one where analyzing this
15 stochastically is very important.

16 Updating the milk, skim milk component price
17 factors for Class III and Class IV, Proposal 1.

18 And then the fifth one would have been
19 Proposal 19, which was to impose the Class I differential
20 surface that National Milk has put together.

21 And then last is to look at all of these scenarios
22 together.

23 So I'm going to look, first of all -- bear with me
24 for one minute because my PowerPoint skipped a couple of
25 the slides here that apparently -- so I'm going to start
26 by looking at the effects of increasing Make Allowances.

27 And again, I'll say, so this is a systemwide
28 approach of the effects. So the table that I have in



1 front of you is a table that shows the changes in the
2 different prices listed in the table relative to the
3 baseline. This is the -- often the way that we look at
4 FAPRI analysis. We're trying to peel that onion back of
5 just what's the small -- shouldn't say small -- but what's
6 the change just from changes in Make Allowances separating
7 out everything else from that.

8 And in the case of increasing Make Allowances, you
9 know, I start by, number one, the Class III milk price
10 decline is \$0.33. Now, that already has built into it
11 effects from the rest of the model, so lowering the
12 Class III prices did lower the all-milk price \$0.30 in the
13 first year. That gives us some modest supply response.
14 That modest lower supply response then also ends up with
15 less manufactured products on the marketplace, and
16 raising, then, wholesale prices for dairy products that
17 enter those class -- minimum class price formulas.

18 So we minimize in some ways the increases in
19 Make Allowances because dairy product prices are higher
20 than where we were in the baseline because we have some
21 slight reduction in milk production.

22 As the supply side, milk production, allowed to
23 adjust more fully across the years, you begin to see that
24 the effects on the all-milk price or the minimum class
25 prices go down from their initial change in 2023. And so
26 by the end of the period we talk about, the results show a
27 U.S. all-milk price change of \$0.04 per hundredweight
28 lower under these higher Make Allowances, and you see then



1 the corresponding changes in the minimum Federal Order
2 class prices as well.

3 The second scenario looked at, again, was removing
4 barrel cheese from the protein component price formula.
5 So under that approach, I was really looking at
6 historically, what's the spread between barrel and block
7 cheese prices to adjust the formula.

8 And in this case, you see in 2023 that the minimum
9 Class III price increases \$0.37 per hundredweight in the
10 first year. That generates higher U.S. all-milk prices of
11 \$0.15, which, again, would slightly increase milk
12 production, milk supplies, creates a few more manufactured
13 products in the first year, which drives down wholesale
14 dairy product prices, and that's why we see a Class IV,
15 for example, that's -- that's lower under that scenario.

16 As production, milk production, is allowed to
17 respond longer-term, we start to see some of those results
18 move back towards closer to the baseline. And by 2032,
19 U.S. all-milk price is \$0.02 per hundredweight above where
20 they were under the baseline; Class III price is \$0.22 per
21 hundredweight higher than where they were under the
22 baseline.

23 Looking at the distribution of -- so this is the
24 change in Class III prices scenario less baseline. There
25 were a few outcomes where leaving the barrel price in
26 might have generated a higher Class III price. Not very
27 many of those observations existed historically.

28 There's also the other end of the tail. So here's



1 a good example of, you look at this cumulative density
2 function, and it is not normal. You see the tail on the
3 right-hand side has a lot more tail to it. But on
4 average, we were talking -- the results show about \$0.35
5 higher Class III prices under the scenario of removing
6 barrel cheese than what we would have seen with barrel
7 cheese in the formula.

8 I'm going -- it's just trying to skip another
9 slide here for me.

10 So the higher-of. So remember the baseline is one
11 that continues current policy. So in this case we had the
12 Class I mover as the average-of Class III, Class IV plus
13 \$0.74, as was passed in the 2018 Farm Bill. The scenario
14 then goes back to the higher-of for the Class I mover.
15 This would be Proposal 13.

16 The results here, in 2023, the Class I mover going
17 into the higher-of was \$0.48 per hundredweight higher in
18 2023, and that generates some additional milk supplies as
19 a result. That lowers Class III and Class IV prices under
20 this scenario relative to the baseline. Here, longer-term
21 we're talking about a U.S. all-milk price in 2032 that was
22 \$0.02 per hundredweight higher.

23 Those averages -- all right. So these are the
24 average results. Now if we start to look at some of the
25 distribution, I think here is where we can find some
26 interest in the analysis as well.

27 I have given you, in this slide, the distribution
28 between Class III and Class IV prices. I have imposed a



1 minus \$1.48 per hundredweight and plus \$1.48 per
2 hundredweight, because when you are within that band of
3 those blue lines, taking the average plus \$0.74 likely
4 returns higher -- a higher Class I mover. Yet, trying to
5 make the point that given the volatility that we have seen
6 in the marketplace and the stochastic baseline process
7 that we use, when you look at the gold line that moves
8 outside the upper or lower bounds of those black lines, we
9 have a situation where the higher-of returns a higher
10 value than using the average plus \$0.74.

11 I sometimes like to characterize this of, which is
12 better, it all depends on the exact path over the next ten
13 years. But relative to this stochastic baseline process
14 that we have together, it will suggest there's a lot more
15 tail outside of the \$1.48 to minus \$1.48 per hundredweight
16 band. That would suggest the higher-of might return a
17 higher Class I mover price. But if you do this kind of
18 analysis deterministically, you are going to miss what I
19 think is a very important piece of the higher-of.

20 I look back to when we first put the higher-of in
21 place in the early 2000s, and I don't think we clearly
22 understood the potential implications of a higher-of
23 process, despite we thought that was a very good approach
24 to the process. And I -- I don't say this being critical
25 of that. It's just when I take the higher of two prices,
26 it gives me the opportunity for, I think, some additional
27 higher Class I mover than any other combination that I
28 might want to think about.



1 I bin these together -- all right, so for those of
2 you that are tired of seeing cumulative density functions
3 this morning, just to put them in bins of a hundred for a
4 minute, and now I'm talking about the actual Class I mover
5 level. So think of the first hundred bins on the
6 left-hand side. So first bin is the first hundred
7 outcomes averaged together on the left-hand side. The bin
8 5 was the highest 500, if you will, on the right-hand
9 side.

10 Just binning those together just reminds me to
11 say, on the ends, we certainly end up with higher Class I
12 mover under the higher-of relative to the baseline, which
13 again, is -- is what we have passed in the 2018 Farm Bill.
14 If you are in the middle bin, bin 3, and also bin 4, we
15 see in a situation where what we passed in the 2018 Farm
16 Bill would return a higher Class I mover.

17 The next slide is the impacts of updating the skim
18 milk solids component, Proposal 1. Again, we're going to,
19 under this scenario, talk about what are higher minimum
20 class prices. Class III price, for example, is \$0.07
21 higher in the first year of the analysis 2023. It results
22 in a U.S. all-milk price that is \$0.05 higher the first
23 year as well.

24 As the supply side modestly increases production
25 to those higher milk prices, we tend to moderate the
26 results. And by the end in 2032, we're talking about a
27 U.S. all-milk price that's one penny above where it was
28 under the scenario.



1 Then the last single one here of Class I
2 differentials. These Class I differentials were provided
3 to me by order from National Milk Producers Federation. I
4 show the Class I mover in this case, in this table, to be
5 consistent with the other proposals that I have looked at
6 here this morning, but you know on top of that Class I
7 mover are going to be the higher differentials under
8 Proposal 19.

9 So if we wanted to think about a minimum Class I
10 price, I'm sure for every order that's going to be higher
11 instead of what's a Class I mover that is lower. However,
12 when we talk about the first year of the analysis, U.S.
13 all-milk prices are \$0.17 per hundredweight higher,
14 generates some additional production, and drives down
15 minimum class prices as a result of then lower wholesale
16 dairy product prices. Again, more milk supply response
17 longer-term tends to moderate the impacts on the all-milk
18 price, so it's only up \$0.02 by the time we get to 2032,
19 yet those individual minimum class prices are still below
20 by 30 to \$0.40 per hundredweight when we look at the end
21 results for these higher Class I differentials.

22 And I close this morning just to make sure that we
23 look at all five of these proposals together at the same
24 time. I like to remind us, so the model is nearly linear,
25 it's not absolutely linear. So you just can't take the
26 simple average of the five individual impacts and come up
27 with the all-scenario line that is at the bottom.

28 Now, in this case the table is, U.S. all-milk



1 price changes for each of the five outcomes:
2 Make Allowance change, remove barrel cheese, higher-of
3 Class I mover, update the skim solids, and then Class I
4 differentials. So now we're just looking in each of this
5 data as only the effect on the U.S. all-milk price.

6 But when you look at all those scenarios taken
7 together, the first-year impacts are for \$0.09 per
8 hundredweight higher U.S. all-milk price. And, again,
9 supplies respond to that higher price, and by the time
10 we're out to 2032, we're talking about U.S. all-milk
11 prices that are about \$0.03 per hundredweight higher at
12 the end.

13 And I think that summarizes from my PowerPoint, my
14 testimony.

15 BY MS. HANCOCK:

16 Q. Thank you, Dr. Brown.

17 I just want to follow up on a couple of points
18 that you raised in your testimony. And maybe I'll start
19 with the summary, if you want to pull that back up because
20 you still have that handy.

21 THE COURT: Again, just for someone reading the
22 transcript, we're in Exhibit 422, the last slide, which if
23 you have a paper copy, is page 18.

24 BY MS. HANCOCK:

25 Q. When you are looking at the summary of all
26 scenarios, that -- that's capturing if all five of
27 National Milk's proposals were adopted and in a final
28 decision as they are proposed today; is that right?



1 A. That is correct.

2 Q. Based on the numbers and the modeling that you
3 did, if National Milk's proposals were put in place, is it
4 going to turn the dairy industry on its head and destroy
5 the dairy industry?

6 A. That is not the summary of the model results that
7 I would have conducted, no.

8 Q. Okay. And what is your -- what is your takeaway
9 when you look at the results of all five of those
10 proposals being put forth?

11 A. So modest impacts on average from those five
12 proposals, I think it's important to realize that, you
13 know, as we make those changes, there are differences and
14 maybe modernization to some of the factors that haven't
15 been changed for decades that are important. But in terms
16 of the overall impacts, I always like to remind us that
17 the industry adjusts oftentimes to whatever changes we're
18 trying to make from a policy perspective, and I think the
19 model reflects that -- that adjustment, whether it is
20 increase in milk supplies or et cetera. But the actors
21 within the industry adjust to whatever policy changes we
22 want to make.

23 Q. Are there policy changes that could be made
24 that -- that don't acclimate over time?

25 A. So, absolutely. You know, I think that the very
26 latest kind of discussion would have been back in the 2014
27 Farm Bill, and there was a lot of discussion when the
28 margin protection program was put in place that it needed



1 supply management associated with it. If you are going to
2 do that kind of supply management, that those impacts stay
3 with you in the industry longer-term.

4 So there are policies that we can change that
5 would move the industry to a different place. But I often
6 say many of the policies that we can talk about affect the
7 path, so where is the industry headed long-term? You can
8 change the path to the long-term, but it probably does not
9 change the long-term outcome of the industry all that
10 much.

11 Q. And based on your review and analysis of the
12 changes that are proposed by National Milk, would any of
13 those have a long-term impact that would alter the course
14 of the dairy industry?

15 A. It does not appear there would be on the model.

16 Q. I want to talk about your work in -- in the annual
17 Congressional report that you are involved in.

18 Can you tell me about that?

19 A. So -- yes. A work that I have been doing with
20 Dr. Capps for about the past five or six years, I -- so
21 under that work, I have been taking what's Dr. Capps'
22 estimates of both the promotion impacts, as well as then
23 the elasticities he gets from the different dairy
24 products, realigning my structural model to his
25 estimation, and then simulating to generate the returns
26 that we see from promotion under that work.

27 Q. Okay. And so you are analyzing the -- the
28 promotion programs for Congress; is that right?



1 A. That is correct.

2 Q. And the effectiveness of those programs to help
3 Congress evaluate whether they should be used in the
4 future?

5 A. That's correct. So Dr. Capps would be doing the
6 estimation of those direct impacts. We're then imposing
7 that into the FAPRI system to help understand the total
8 impacts of what did producers have to put in, or what did
9 market participants have to pay in terms of those
10 promotion programs, and then what's ultimately the payoff
11 from those programs. So I'm kind of the second stage, if
12 you will, of that work that Dr. Capps does on the
13 estimation side.

14 Q. And as part of those estimations, Dr. Capps and
15 you look at the elasticities of the milk, of the total
16 milk; is that fair?

17 A. That is correct.

18 Q. Can you tell me what information is used to
19 evaluate those elasticities?

20 A. Yes. So I -- I will take from Dr. Capps'
21 estimation, both his estimates of the own-price
22 elasticity, and then the impacts of dairy promotion gets
23 introduced into the annual framework as well. Those are
24 the two pieces for me that, then, I will take the
25 simulation model and incorporate, and then run these
26 alternatives scenarios.

27 Q. And in the work that you have done, you said that
28 you have been doing it for the last five years with



1 Dr. Capps?

2 A. Yeah, roughly the last five years is when I became
3 involved. I think Dr. Capps has been doing it for a
4 longer period of time, but it was an add to his work to be
5 able to talk about the BCRs from doing that work.

6 Q. And what's a BCR?

7 A. It's really just the return on investment from
8 dairy promotion. That's -- that's ultimately what that
9 project is trying to do. What's the -- what's the return
10 of dairy promotion expenditures for the industry?

11 Q. Is the -- is your plan to continue to work with
12 Dr. Capps in the future as well?

13 A. That is the current plan.

14 Q. Okay.

15 A. At least until I retire, that's my --

16 Q. And you have -- you were involved in -- in the
17 Congressional report that was most recently published in
18 September of 2023 that covered the time period from 1995
19 through 2020; is that right?

20 A. That is correct.

21 Q. And do you recall what the elasticity conclusion
22 was in that report to Congress?

23 A. So I believe the fluid own-price elasticity, if
24 that's the one we're going to make reference to, so less
25 elastic than what was in the current version of the FAPRI
26 model as I recall, somewhere a little less than minus .05.

27 Q. Okay. I think Dr. Capps testified that it was
28 negative .038.



1 Does that sound correct?

2 A. It does sound familiar.

3 Q. Okay. And since that time, have you been involved
4 in analyzing the elasticities since then?

5 A. So we are -- have worked on the update that would
6 be through 2021 as well that's not publicly available at
7 this point.

8 Q. Have they gone up or have they gone down?

9 A. So they haven't -- I will just say, characterize
10 it as they haven't changed a whole lot. When you are
11 talking about a minus .038, that is very inelastic, which
12 really means consumers seem to have very little response
13 to changes in fluid milk prices. If anything, I think we
14 continue to get more inelastic, which is, frankly, not any
15 different than when I look at my own work over the last
16 three decades of what's been retail fluid elasticities
17 that have continued to be smaller, more negative over
18 time.

19 Q. And the Judge had made a note earlier that it's
20 really important for our transcript to be able to hear the
21 difference in what you are saying between elastic and
22 inelastic, so I want to make sure that our record is very
23 clear on this.

24 Are you saying that -- that the total milk price
25 for own-price elasticities has gone even more inelastic?

26 A. That is correct. More inelastic over the period
27 where I have been looking at estimations.

28 Q. Okay. So even from a report that would estimate



1 the elasticities of milk up through 2020, if we were to
2 update that through today, you have not seen anything that
3 would be credible in order for you to conclude anything
4 different than -- than dairy prices are highly inelastic?

5 A. When you look at the dairy promotion work that we
6 have been doing, that's correct.

7 Q. Okay. And I think that we -- are you familiar
8 with the work that -- that Dr. Kaiser did for National
9 Milk in evaluating the elasticities?

10 A. So somewhat familiar, yes.

11 Q. And you understand that he concluded the same
12 thing, that if dairy price -- or that total milk was
13 highly inelastic?

14 A. Yes.

15 Q. And he took the totality of 38 different studies,
16 and took the median and the mean averages, and used the
17 totality of those to draw that conclusion.

18 Were you aware of that?

19 A. Yes, I am.

20 Q. Is that a methodology that you believe is standard
21 in the industry to determine and evaluate elasticities?

22 A. I think it has a lot of advantages in the
23 approach. And I look at it this way, I work in a soft
24 science world. As much as I sometimes now wish I would
25 have gotten my Ph.D. in a hard science where things might
26 have been more black and white, I'm working with data that
27 has a lot of noise beyond what I'm trying to measure in
28 that data.



1 And so being able to look at a number of different
2 ways to approach how you -- how to estimate fluid milk
3 elasticities, I think is important. We should be looking
4 at all the information that's available from those experts
5 that have been out there publishing the literature
6 different ways to estimate elasticity -- own-price
7 elasticities.

8 Q. So you are saying that taking the collection of
9 the various peer-reviewed studies into account when you
10 are evaluating those elasticities is important to factor
11 in all of the noise or variables that happen.

12 A. Correct. I think it's hard to look at one
13 analysis and draw serious conclusions. Looking at all of
14 them, I think they all offer opportunities for us to think
15 about the best own-price elasticity estimates.

16 Q. And, obviously, you have been working pretty
17 closely with Dr. Capps over the last five years using
18 elasticity analysis for the dairy industry; is that right?

19 A. That is correct.

20 Q. In the work that you have done with Dr. Capps,
21 have you ever been involved in any studies with him where
22 you have collectively concluded that the total price of
23 dairy products was elastic?

24 A. I have not been involved with him.

25 Q. And are you familiar with the testimony that he
26 gave at this hearing?

27 A. I am -- I'm somewhat familiar with that testimony,
28 yes.



1 Q. And are you familiar with the methodology that he
2 used in analyzing the IRI dataset?

3 A. Yes.

4 Q. I think it's called Circana now.

5 A. Yes. Correct.

6 Q. And what is your understanding about what the use
7 of that dataset is and the methodology he was using?

8 A. So number one, we're -- I believe he was looking
9 at weekly data in -- in that IRI data. There are
10 advantages here of being able to see a number of different
11 dairy products, and so maybe breaking it into those
12 different types of fluid milk is important. So it's
13 another approach to estimating fluid milk elasticities
14 that one should be looking at.

15 I think more and more we have an opportunity to
16 see scanner data today that in the past wasn't
17 availability to us, to look at different ways to estimate
18 elasticities.

19 Q. And that weekly analysis, what -- what would be
20 the benefit of looking at it on the weekly level capturing
21 the IRI data for the retail data that it captures?

22 A. Yes. So for me, getting really short-term,
23 getting up against the current situation, if I can have
24 weekly observations, I could get a -- I would have a lot
25 more observations to do estimation with that are closer to
26 where the industry might be today. I think that's some of
27 the benefits of taking that weekly approach. It's a
28 direct measure of sales that I think sometimes has some



1 advantages relative to some other data sources available
2 to us to think about the consumption side.

3 Q. And if we look at the total supply chain from the
4 farm all the way to the retail outlet, it gives you a
5 capture of the lens that's happening just at the retail
6 side for the a limited subset of products; is that right?

7 A. That's correct. We're only going to look at
8 retail sales data there, which is going to miss some of
9 the other fluid consumption that's occurring in the
10 industry.

11 Q. Okay. And so it might be a value to a retail
12 outlet when they are trying to determine if the market
13 would absorb a price increase if they're tired of taking
14 it as a loss leader product, for example?

15 A. Absolutely. And I think the other benefit here is
16 that provides us the opportunity look at those alternative
17 beverages as well and to see what kind of cross-elasticity
18 impacts those have.

19 Q. And when you are doing your Congressional reports,
20 when you are analyzing policy for Congress, what is the
21 measure of time that you are looking at for those reports?

22 A. Yes. So there we're looking at -- so to the dairy
23 promotion work that I'm doing with Dr. Capps, he is
24 estimating quarterly elasticities. We're still using the
25 annual framework from the FAPRI system in the portion of
26 the work that I'm doing.

27 Q. And as you sit here today, are you aware of any
28 recommended changes to the annual reporting and



1 methodology that you and Dr. Capps were using for setting
2 policy for Congress?

3 A. I'm not aware of any.

4 Q. And what do you believe is the appropriate measure
5 of time and scope for use in evaluating policy decisions
6 that affect the dairy industry?

7 A. I think given the history of how we have handled
8 dairy policy, doing it on an annual framework has been the
9 most normal way of addressing policy change.

10 Q. Okay. And is there a reason why you think that
11 the retail outlet and the weekly measurements would not be
12 appropriate for setting policy?

13 A. So I think it is -- it's important to think about
14 what the annual response is. That weekly data is much
15 shorter. I think most of us would agree that weekly
16 elasticities are going to show more elastic response than
17 annual elasticities will show because consumers could
18 choose one week to forego dairy sales. Over an annual
19 period, we start to level out some of that more lumpiness
20 that we might find in the weekly data.

21 Q. And is it also fair to say that if you are going
22 to be making policy changes and recommendations that you
23 want to have more than just a limited subset of data, you
24 would want to have the entire dairy market analyzed?

25 A. Absolutely. We want to know the effects relative
26 to total fluid milk demand, and I think we want it on a
27 time step that's similar to the approach we're going to
28 take to analyze that policy as well.



1 Q. And that's the -- that's what you do for the
2 Congressional reporting?

3 A. That is correct.

4 Q. And that is the elasticity basis and conclusion
5 that you used for purposes of your analysis that you did
6 for National Milk; is that right?

7 A. That is correct.

8 Q. And you stated on -- when you were on page 5 of
9 Exhibit 422 when you were talking about the key
10 elasticities, you stated that those elasticities are --
11 excuse me -- that the model that you were running was
12 critically dependent on the elasticities that were built
13 into the model; is that right?

14 A. That is correct.

15 Q. And do you feel confident that the elasticities
16 that you built into this model accurately reflect the
17 elasticity analysis for the current dairy industry?

18 A. Given my long-term experience, I feel like those
19 are the best elasticities to use for conducting this kind
20 of policy research.

21 Q. And does that incorporate the most recent
22 elasticity results that were reported in that
23 September 2023 USDA report?

24 A. So I think, again, that would be the case where I
25 would have used Dr. Capps' own-price elasticity. Very
26 similar, very inelastic as well. More -- in fact, more
27 inelastic than what I might use, or that I do use in the
28 policy work that I'm doing for Farm Bill options.



1 Q. And so that was somewhere in the range of negative
2 .038 or less?

3 A. That's correct.

4 MS. HANCOCK: At this time, Your Honor, that's all
5 the questions that I have. We would make Dr. Capps
6 available for cross-examination.

7 I'm sorry, I said Dr. Capps, I meant Dr. Brown. I
8 would love to have Dr. Capps back for more
9 cross-examination.

10 But we would make Dr. Brown available for
11 cross-examination.

12 THE COURT: I'd like to take a five-minute stretch
13 break. Let's see, a little longer than five, please.
14 Please be back and ready to go at 9:25.

15 (Whereupon, a break was taken.)

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

17 We're back on record at 9:25.

18 Cross-examination may begin.

19 Would you identify yourself, please.

20 CROSS-EXAMINATION

21 BY MR. ROSENBAUM:

22 Q. Dr. Brown, my name is Steven Rosenbaum. I
23 represent the International Dairy Foods Association.

24 Good morning.

25 A. Good morning.

26 Q. I want to start with just a question of
27 clarification.

28 In your PowerPoint presentation, do you have a



1 copy of that?

2 A. I do.

3 Q. Which is Exhibit --

4 THE COURT: 422.

5 BY MR. ROSENBAUM:

6 Q. -- 422. On page 6 you state, in the first bullet
7 point, "The work on Federal Milk Order scenarios was
8 conducted in 2022 under a grant agreement between NMPF and
9 the University of Missouri."

10 Do you see that?

11 A. I do.

12 Q. And that's a reference to the work on Federal Milk
13 Order scenarios that is your testimony today, correct?

14 A. That's correct.

15 Q. Did you perform that in 2022?

16 A. Yes, I did.

17 Q. Okay. Okay. Now, are you aware that National
18 Milk has changed its proposal since 2022? And I have
19 specific reference as to Proposal 19 with regard to the
20 increase in Class I differentials, where they have changed
21 their request as to what the increase in Class I
22 differentials should be.

23 So my question is, does your scenario and analysis
24 that you present today reflect the actual National Milk
25 proposal as submitted after the changes they made in 2023,
26 or, instead, does it reflect the numbers that National
27 Milk had had in mind back in 2022?

28 A. So it does reflect the final numbers. So I did



1 analysis on a set of Class I differential changes back in
2 September of 2022, that I then came back in very early
3 2023 and updated to the final ones.

4 Q. Well, when in 2023 did you do that work?

5 A. That would have been done in January of 2023.

6 Q. All right. And if the record would disclose that
7 National Milk, in fact, made changes in those January 2023
8 numbers, and that the numbers they actually submitted
9 reflected numbers they did not develop until June 2023,
10 would that indicate that you, in fact, have not used in
11 your analyses the final National Milk numbers?

12 A. So if there were changes after the work that I did
13 in early 2023, it would not be incorporated, that is
14 correct.

15 Q. And so you have no view, I take it, as to what
16 impact those changes would have on your final numbers?

17 A. That is correct.

18 Q. All right.

19 MR. ROSENBAUM: Let me, if I could ask that a copy
20 of Hearing Exhibit 13 be made available to the witness.

21 USDA REPRESENTATIVE: Exhibit 13?

22 MR. ROSENBAUM: 13.

23 And, Your Honor, I have a document that I would
24 like to -- if I could approach the witness with as well, a
25 separate document, but I need him to look at both.

26 THE COURT: All right. But have you had a chance
27 to give opposing counsel a look at what you are about to
28 show him?



1 MR. ROSENBAUM: I'm going to give it to everyone
2 at the same time. Yes, Your Honor.

3 THE COURT: Oh, okay. Fine.

4 Now, both the witness and the Judge have record
5 copies of Exhibit 13, and we must make sure we return that
6 when this questioning is completed.

7 THE WITNESS: All right.

8 BY MR. ROSENBAUM:

9 Q. So I want to start with the question of
10 eliminating barrels from the calculation of the protein
11 price. Okay?

12 And if you turn to page 7 of your written
13 testimony, which is Hearing Exhibit 421, you have a
14 heading that says "Discontinue the use of the barrel
15 cheese price."

16 Do you see that?

17 A. Yes.

18 Q. All right. And the first document I have given
19 you is called "The Current Use of the Barrel and Block
20 Cheese Prices in the Federal Milk Order System." I'm not
21 going to mark this as an exhibit because I've just
22 replicated verbatim the regulation, but I did this just so
23 it would be handy. Obviously, we don't need to put
24 regulations into the record.

25 But this is the definition of the protein price.
26 Do you see that in the regulation?

27 A. Yes.

28 Q. And the -- the -- what it says in the first part



1 of it is, "The protein price per pound, rounded to the
2 nearest one-hundredth cent, shall be computed as follows:

3 (1) Compute a weighted average of the amounts
4 described in paragraphs -- "

5 THE COURT: More slowly, please.

6 MR. ROSENBAUM: Sorry. Thank you, Your Honor.

7 BY MR. ROSENBAUM:

8 Q. "-- compute a weighted average of the amounts
9 described in paragraph (n)(1) &i and &ii [sic] of this
10 section."

11 And then &i [sic]: "The U.S. average NASS survey
12 price for 40-pound block cheese reported by the Department
13 for the month; and

14 "&ii [sic] The U.S. average NASS survey price for
15 500-pound barrel cheese" -- "cheddar cheese (38% moisture)
16 reported by the Department for the month plus \$0.03."

17 Do you see that?

18 A. Yes.

19 Q. And is that your understanding -- and then it goes
20 on from there to deal with the Make Allowance, but I'm not
21 going to -- that's not the subject of my questioning here.

22 So is that your understanding as to how the
23 protein price currently works?

24 A. Yes.

25 Q. Okay. And so if I could now draw your attention
26 to Hearing Exhibit 13, which I have asked to be shown to
27 you.

28 And if you turn to page 7, and what's described as



1 Proposal 3. This is the document by which USDA has, if
2 you will, redlined the current regulation to explain what
3 the proposals will do. This is the National Milk proposal
4 in the barrel-block cheese issue.

5 And basically, do you see that the proposal is
6 simply to eliminate the participation of the barrel price
7 from the formula?

8 A. Yes.

9 Q. And that would simply mean that the formula would
10 continue as is, except it would now exclusively use the
11 block price to set the protein price?

12 A. Yes.

13 Q. Okay. Just -- I'm -- this is just orientation to
14 make sure we're all on the same page about this proposal.

15 So now let's go back to your written testimony on
16 page 7 under the heading "Discontinue the use of the
17 barrel cheese price." And I just want to read the key
18 language, which is what's right under that quote: "This
19 scenario removes the barrel cheese price from the protein
20 component price formula. The effects of this scenario
21 depend on the barrel cheese price relative to the block
22 cheese price. Looking at historical relationship of the
23 barrel cheese price to the block cheese price over the
24 2000 to 2022 period, including barrel cheese prices into
25 the protein component price formula would have resulted in
26 a higher price less than 3% of the time. In about 10% of
27 the historical observations eliminating the barrel cheese
28 price would have raised the Class III milk price by \$0.75



1 per hundredweight or more. For most of the historical
2 period, the effect of removing the barrel cheese price on
3 the Class III price was an increase of zero to \$0.75 per
4 hundredweight. This distribution of the impact is
5 important to this particular analysis, as the exact
6 difference between block and barrel cheese price is
7 essential to the results."

8 Do you see that?

9 A. Yes.

10 Q. And every time you refer to the historical
11 observations in this section that I have read, I take it
12 you are referring to the 2000 to 2022 period; is that
13 correct?

14 A. That is correct.

15 Q. Okay. And when you say in the last sentence,
16 "This distribution of the impact is important to this
17 particular analysis," your reference to "particular
18 analysis" is to your analysis in your report of the impact
19 of eliminating the barrel price from the formula, correct?

20 A. That is correct.

21 Q. Now, obviously, we know what the barrel price and
22 the block cheese prices were between 2000 and 2022,
23 correct?

24 A. Yes.

25 Q. And so we also know what the block price and the
26 barrel price plus \$0.03 was, correct?

27 A. That is correct.

28 Q. And that's how the formula actually works,



1 correct?

2 A. That is correct.

3 MR. ROSENBAUM: Your Honor, I now have a document.
4 I would like to approach the witness, and I'm going to ask
5 that this document be marked with the next Hearing
6 Exhibit.

7 THE COURT: All right. But before you do that,
8 when you read from the document that you say you do not
9 want to have as an exhibit because it's just the
10 regulation, a couple of times as you read through it, you
11 used the term "ampersand," and I didn't understand your
12 use of that with regard to what you were reading.

13 Would you have any objection to our making part of
14 the record what you read?

15 MR. ROSENBAUM: Not at all. And if I misused the
16 term, I stand corrected. I believe that means the -- if
17 you will, the little i and two little ii, that term
18 "ampersand," but if I'm wrong about that. But in any
19 event, I have no objection to marking that as a Hearing
20 Exhibit, Your Honor.

21 THE COURT: I think the ampersand is the symbol
22 for "and."

23 MR. ROSENBAUM: Then --

24 THE COURT: And I do think the easiest way to
25 understand the little i and the two little i's is just to
26 say that.

27 But Ms. Hancock had a Latin term that I'm not
28 familiar with that also describes those little i's on a



1 previous occasion.

2 MS. HANCOCK: Romanette.

3 MR. ROSENBAUM: Romanette. Your Honor, it's --

4 THE COURT: Romanette.

5 MR. ROSENBAUM: -- Romanette, and I stand
6 corrected. That was my mistake.

7 THE COURT: And I couldn't even remember what she
8 had said because I have never heard it before.

9 MR. ROSENBAUM: I was mixing up my phrases, Your
10 Honor.

11 But I - in any event, I certainly have no
12 objection to marking that, if that's preferred, Your
13 Honor.

14 THE COURT: All right. I think that's the best
15 way for the -- I think that's the best way.

16 Now, also we have got it correct in Exhibit 13,
17 so -- so that also could be how the problem is solved.

18 MR. ROSENBAUM: Well, Your Honor, in that case,
19 let's just rely on Exhibit 13 as the correct language.

20 THE COURT: All right. Good. Thank you. I think
21 that's an excellent way to go, and that is on page 7 of
22 Exhibit 13.

23 All right. Now you may deal with this next
24 exhibit.

25 MR. ROSENBAUM: All right, Your Honor. I will
26 distribute this to the -- copies.

27 THE COURT: Let's go off record for just a moment
28 at 9:38.



1 (An off-the-record discussion took place.)

2 (Thereafter, Exhibit Number 423 was marked
3 for identification.)

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

5 We're back on record at 9:39.

6 Mr. Rosenbaum, I have marked this exhibit as
7 Exhibit 429, IDFA Exhibit 59.

8 You may proceed.

9 All right. Exhibit 423, IDFA-59. Thank you.

10 BY MR. ROSENBAUM:

11 Q. Dr. Brown, I will -- let me just explain this
12 document.

13 As we were discussing a moment ago, your
14 discussion of the discontinuance of the use of the barrel
15 cheese price references the period from 2000 to 2022,
16 correct?

17 A. I think it's -- yes. You are correct.

18 Q. And so from pages 1 through 9 -- let me start that
19 question again.

20 For pages 1 through 8 we have simply copied
21 information from either the NASS dairy products prices
22 report, that's for the period 2000 through 2012, or the
23 National Dairy Products Sales Reports, that's from 2012 to
24 2022. And that's -- those are the documents that set
25 forth the data that are used to set the protein price.

26 So as you will see, there is a separate entry for
27 each month.

28 Do you see that?



1 A. Yes.

2 Q. And you are aware that the protein price is based
3 upon a weighted average of the block price and the barrel
4 price plus \$0.03, correct?

5 A. Yes.

6 Q. And so what we have done here is simply copied,
7 under the Column B, the weighted average; Column A
8 obviously is the month, as announced by the government,
9 that's the weighted average as announced by the
10 government; Column C is the announced block price;
11 Column D is the announced barrel price; Column E is the
12 announced barrel price plus \$0.03, which is what is
13 actually used to set the formula.

14 Do you see all of that?

15 A. Yes.

16 Q. Okay. And then in Column G we have compared the
17 block price to the barrel price.

18 Do you see that?

19 A. Yes.

20 Q. And in Column -- and if the difference is black --
21 the different -- let me just say, the difference is in
22 black color when the block price was higher than the
23 barrel price, and it's red when the block price is less
24 than the barrel price. Okay?

25 A. Okay.

26 Q. Do you see that?

27 Then the next column, Column H, is the block price
28 versus the barrel price plus \$0.03.



1 Do you see that?

2 A. Yes.

3 Q. And this is actually what is used -- strike that.

4 And once again, it's the barrel price plus \$0.03
5 that actually is used in the formula.

6 Do you see that?

7 A. Yes.

8 Q. And then Column -- once again, it's black when the
9 block price was higher than the barrel price plus \$0.03,
10 and it's red when the block price was lower than the
11 barrel price plus \$0.03. Okay?

12 That last column, Column I, that's the block price
13 versus the weighted average. It's black when the block
14 price is higher than the weighted average, and it's red
15 when the block price is lower than the weighted average.

16 So if you look at Column H, you can see how many
17 months the block price was higher than the barrel price
18 plus \$0.03, those are the black ones, and how many times
19 the block price was lower than the barrel price plus
20 \$0.03, and those are red. Okay?

21 And then finally, if you go to the very end of
22 page 8, once again in Column H, there's a summary.

23 Do you see that?

24 And what this shows is that if you look at those
25 months, the block price was higher than the barrel price
26 plus \$0.03 only 37% of the time, 101 times out of
27 276 months. That's Row 310.

28 Conversely --



1 THE COURT: Wait, wait. Go slowly, because this
2 part is where you are getting to the importance of your
3 examination.

4 MR. ROSENBAUM: Yes.

5 BY MR. ROSENBAUM:

6 Q. That's Row 310 for the number of months and
7 Row 313 for the percentage of months, 37%.

8 Conversely, the barrel price plus \$0.03 is higher
9 than the block price 63% of the time. That's shown in
10 Row 314. And that represents 175 of the 276 months, which
11 is in Row 311.

12 Do you see that?

13 A. Yes, I see those numbers.

14 Q. Okay. So now I take you back to your testimony on
15 page 7 where you say, "Over the 2000 to 2022 period,
16 including barrel cheese prices in the protein component
17 price formula would have resulted in a higher price less
18 than 3% of the time."

19 Do you see that?

20 A. Yes.

21 Q. But doesn't the data I just showed you indicate
22 that, in fact, including the barrel price in the protein
23 price formula resulted in a higher price not 3% of the
24 time as you indicate, but 63% of the time?

25 A. So that's what the data you have in this table
26 suggests.

27 Q. Do you have any explanation for the discrepancy
28 between your testimony and this data, assuming its



1 accuracy?

2 A. So I will say don't forget we're talking about a
3 scenario impact here. So the figure -- sorry -- the -- my
4 PowerPoint presentation, page 12, was the reference of the
5 results of eliminating the barrel cheese price. So
6 there's those changes happening from the rest of the
7 system as well as just the simple historical arithmetic.

8 Q. But your testimony explicitly references the 2000
9 to 2022 period and purports to represent that including
10 the barrel price only resulted in a higher price 3% of the
11 time.

12 That was the discussion of the historical reality,
13 wasn't it?

14 A. That was the results of the analysis assuming that
15 historical block versus barrel.

16 Q. Weren't you, in your statement, purporting to say
17 that the participation of the barrel price in setting the
18 protein price during the period 2000 to 2022, only
19 resulted in a higher price less than 3% of the time?
20 Isn't that what your statement says?

21 A. So I -- again, I refer to the PowerPoint
22 presentation where it shows page 12 of the change in the
23 Class III price scenario minus baseline in -- in those --
24 in that outcome relative to what's written in my written
25 statement here.

26 Q. But that's a projection forward from 2022 through
27 2032, correct?

28 A. So that is correct. The combination of historical



1 differences between block and barrel cheese prices
2 appropriately weighted on top of the scenario is what
3 results in what is Figure 12 -- sorry -- page 12 of the
4 PowerPoint presentation.

5 Q. Okay. You agree with me that from the historical
6 perspective, assuming the accuracy of the numbers I have
7 shown you in IDFA Exhibit 59, which is Hearing
8 Exhibit 423, from a historical perspective, going all the
9 way from 2000 to 2022, which is, I believe, the entire
10 period when that formula has been in use -- still in use
11 today -- including the block price resulted in a -- excuse
12 me, start that question again.

13 Do you agree with me that from the historical
14 period of 2000 to 2022, which is the entire period the
15 formula's been in effect -- of course, it's now still in
16 effect -- including the barrel cheese price resulted in a
17 higher price 63% of the time, not 3% of the time?

18 A. So according to this historical data in the table,
19 yes. Again, the information I'm providing is not only
20 taking that historical data as some base, but then running
21 the scenario of removing the barrel cheese price, which I
22 think is creating the difference in the answer that you
23 are seeing.

24 Q. Well, we'll get to in a minute to what effect this
25 has on your projections, but certainly you would concede
26 that your statement on page 7 is just incorrect?

27 A. So maybe interpreted differently than it was
28 written. But, again, we're talking -- I'm trying to talk



1 about the impacts of removing barrel cheese price over the
2 2023 to 2032 period.

3 Q. Okay. Let's skip down to the couple sentences
4 further on page 7 where you say -- you see the sentence
5 that begins, "for most of the historical period"? Do you
6 see that?

7 A. I'm sorry, can you repeat that?

8 Q. Yes. The sentence that begins "for most of the
9 historical period."

10 Do you see where I am? It's a little more than
11 halfway down the first paragraph.

12 A. Yes.

13 Q. Okay. So just reading that quote, "For most of
14 the historical period, the effect of removing the barrel
15 cheese price on the Class III milk price was an increase
16 of zero to \$0.75 per hundredweight."

17 Do you see that?

18 A. Yes.

19 Q. And isn't it fair to say that, in fact, the data
20 that I have shown you in Hearing Exhibit 423 indicates
21 that 63% of the time the effect of removing the barrel
22 cheese price would have resulted in a negative number, not
23 an increase in the protein price?

24 A. So the data that you provided me, that's, yes,
25 what it looks like. Again, I'm trying to look over the
26 forecast period of that scenario relative to the baseline.

27 Q. But -- but you're sort of selling the -- if you
28 will, the advantages of the proposed formula change by



1 representing on page 7 of Exhibit 421, that had this
2 change been in effect from 2000 through 2022, it would
3 have increased the protein price, and yet that's just not
4 right.

5 Isn't that fair?

6 A. I think you are interpreting what's written there
7 differently than maybe the intention of what was meant to
8 be said there.

9 Q. And you -- and just for completeness purposes, I
10 will call your attention to page 9 of Hearing Exhibit 423,
11 the one that I presented, where we simply translated the
12 data to be annual data, in case that somehow was the
13 issue, the use of annual data versus monthly.

14 But if you look at Column H, do you see that going
15 to Rows 32 and 33, eliminating the barrel price from the
16 formula would have increased the protein price only 26% of
17 the time, but decreased the protein price 74% of the time,
18 correct?

19 A. I see that in your table.

20 Q. Okay. And so you would agree with me that the use
21 of annual versus monthly data does not have a material
22 effect on the data; is that fair?

23 A. That's what your table shows.

24 Q. And after telling us on page 7 about the purported
25 historical impact, had it been in effect, of the
26 elimination of the barrel cheese price, you conclude,
27 quote, "This distribution of the impact is important to
28 this particular analysis as the exact difference between



1 block and barrel cheese price is essential to the
2 results."

3 Do you see that?

4 A. Yes.

5 Q. And I assume that historical data is part of what
6 the calculation is for purposes of making your projections
7 in the future?

8 A. Making draws off that historical period, yes.

9 Q. Okay. Let's switch to another topic.

10 THE COURT: Before you do, Mr. Rosenbaum, let's go
11 to the bottom of page 9 where you indicate your data
12 sources, and I want to know which parts of Exhibit 423
13 were reported by NASS.

14 MR. ROSENBAUM: You are asking me, Your Honor?

15 THE COURT: Yes.

16 MR. ROSENBAUM: Your Honor, I believe that B, C,
17 D -- well, let me start again.

18 Columns A, B, C, D, and E are all reported
19 numbers, and then the rest are simply literally pluses or
20 minuses -- I mean, by "the rest," I mean, G, H, and I are
21 simply pluses and minuses with respect to what's in B, C,
22 D, and E.

23 THE COURT: All right. And when I said "NASS," I
24 see part -- some of the years were from NASS and some of
25 the years were from the National Dairy Product Sales
26 Report.

27 MR. ROSENBAUM: Yes, Your Honor. The entity
28 within USDA that reported this number switched in 2012,



1 but it's the same number.

2 THE COURT: All right. And then how did the
3 software that you utilized for the adding the numbers and
4 so forth do the calculation? Did you use a particular
5 kind of a spreadsheet or --

6 MR. ROSENBAUM: This is an Excel spreadsheet, Your
7 Honor.

8 And, Your Honor, Mr. Brown, Mr. Mike Brown --
9 sorry, our other Mr. Brown, who will be our first
10 witness -- put together the document. I'm intending to
11 ask him about it. So I -- I think I know the answer to
12 your question, but I would prefer to have him answer them
13 to make sure they are absolutely correct.

14 THE COURT: All right. Thank you. All right.
15 And you wanted now to leave this subject and bring us a
16 new document.

17 MR. ROSENBAUM: I don't have any -- I'm
18 literally -- I'm leaving the block barrel subject. I
19 don't have another document to use quite yet, Your Honor.

20 THE COURT: Okay.

21 MR. ROSENBAUM: I just have some questions.

22 THE COURT: Understood. Thank you.

23 BY MR. ROSENBAUM:

24 Q. Okay. So let's talk about a bit about FAPRI and
25 its methodology, if we could.

26 So I think you have said this already. I'm -- I
27 think you say it in your report, that FAPRI is often
28 called upon to assess the impact of proposed policy



1 changes affecting agriculture, correct?

2 A. Correct.

3 Q. And to do that analysis, you will utilize a base
4 case market outlook, and then -- which FAPRI creates, and
5 then assess how that outlook would be affected if certain
6 proposed policy changes are changed, correct?

7 A. That is correct.

8 Q. I didn't say that quite right.

9 If certain proposed policy changes are adopted,
10 correct?

11 A. Yes, that is correct.

12 Q. And -- and that's -- and every -- every year FAPRI
13 prepares what they call a U.S. Agricultural Market
14 Outlook, correct?

15 A. That is correct.

16 Q. And I'm going to mark it.

17 THE COURT: Let's go off record while we deal with
18 the -- identifying the document that's being distributed.

19 We'll go off record at 9:59.

20 (An off-the-record discussion took place.)

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

22 We're back on record at 10:00 a.m.

23 Mr. Rosenbaum, I have marked this document, and
24 I'll let you identify it in just a moment, as Exhibit 424,
25 IDFA-60. And you may proceed.

26 (Thereafter, Exhibit Number 424 was marked
27 for identification.)

28 ///



1 BY MR. ROSENBAUM:

2 Q. Dr. Brown, I'm sure you recognize this document.

3 Is this, in fact, the U.S. Agricultural Market
4 Outlook published by FAPRI in March 2022?

5 A. It is.

6 Q. And, in fact, you make reference in your testimony
7 to this particular document, correct?

8 A. I do. Yes.

9 Q. Okay. And -- and this is a document that -- and I
10 believe -- I believe you testified to this -- this is a
11 document that FAPRI publishes every March, basically,
12 correct?

13 A. Basically every month.

14 Q. And -- and it's -- it covers a variety of
15 agricultural commodities, including dairy, which appears
16 on page 63 of this particular document; is that right?

17 A. That is correct.

18 Q. And according to the second page of the document,
19 it doesn't have a number, it's the page that's right after
20 the cover, it states -- it lists people who are
21 prepared -- who were participants in preparing the
22 document, correct?

23 A. Yes, it does.

24 Q. And -- and you are listed as one of them, correct?

25 A. That is correct.

26 Q. And you're responsible for the -- among other
27 things -- the dairy and consumer price projections,
28 correct?



1 A. You are correct.

2 Q. Okay. Now, what I want to focus on now is your
3 testimony on -- starting on page 4.

4 And I take it that you did not simply run the
5 National Milk proposals against this baseline as shown in
6 Exhibit 424, correct?

7 A. That would be correct as well.

8 Q. Now, is it, in fact, common when Congress asks you
9 to do analyses of the impacts of proposed changes that you
10 do, in fact, use the actual baseline as your starting
11 point?

12 A. A majority of the time, but there have been
13 exceptions in the past.

14 Q. And the work you did for National Milk was an
15 exception, correct?

16 A. It was not using the straight March 2022 baseline.

17 Q. Okay. And you say that -- I'm just looking at
18 page 4 of your testimony -- that "the March 2022 dairy
19 baseline was modified in July 2022 based on NMPF's staff
20 and member feedback."

21 Do you see that?

22 A. Yes.

23 Q. Is it fair for me to interpret that language to
24 mean that the only individuals with whom you consulted for
25 purposes of making these modifications were
26 representatives of National Milk?

27 A. That would be correct.

28 Q. Okay. And you say that the -- strike that.



1 And so you actually ended up developing a new
2 baseline in July 2022 based upon that National Milk
3 participation, correct?

4 A. Yes. That would be from their feedback starting
5 with the March 2022 baseline.

6 Q. And -- and this was work that you were doing for
7 purposes of this hearing as opposed, for example, to --
8 well, let me just -- I should have put a question mark on
9 the end of that.

10 This was work you were doing specifically for
11 purposes of this hearing, correct?

12 A. It actually was not for purposes of this hearing
13 because it was done in advance of National Milk actually
14 forming an opinion, a decision about what they wanted to
15 move forward. So it was done in -- in mid-2022 when I
16 think they were getting ready to talk internally relative
17 to their annual meeting time to decide what proposals they
18 were interested in moving forward.

19 Q. In any event, this was work you were doing
20 specifically for the project that has now culminated in
21 your testimony; is that fair?

22 A. It was work done relative to the grant entered
23 into with between the University of Missouri and National
24 Milk in mid-2022.

25 Q. And that was work relating to National Milk's
26 consideration of proposing changes in the Federal Order
27 system, which ultimately have resulted in these hearings,
28 correct?



1 A. That is correct.

2 Q. Okay. Now, did you consult with anybody other
3 than National Milk?

4 A. Are you asking about just the baseline?

5 Q. In -- in coming up with the July 2022 baseline --
6 strike that.

7 In -- in relation to the changes you made between
8 the official March 2022 FAPRI baseline, which is
9 Exhibit 424, and the July 2022 baseline that you created.

10 A. So, no, I did not. I did not. So this was a
11 conversation or discussion back and forth between myself
12 and those National Milk Producers Federation
13 representatives about what possible changes needed to be
14 made. They were not just, "Hey, make this change." It
15 was still my ability to push back or say, "It's a change I
16 don't want to make." So it was not just them imposing
17 those changes.

18 And, again, the start of this conversation back in
19 2022 had a lot to do with some changes in market behavior
20 that we did not capture very well in the March 2022 FAPRI
21 baseline. If you look at page 63 of the document that you
22 handed to me, the 2022 U.S. all-milk price that was
23 estimated in March of 2022 of \$22.04 was too low. Markets
24 had moved substantially higher since that work was done.
25 And I -- it was appropriate to talk about the kinds of
26 adjustments that needed to be made to the baseline to make
27 sure it was a more accurate reflection going forward than
28 where we were in March.



1 Q. Do you recall what specific changes were made
2 between the official March 2022 FAPRI model that's
3 Exhibit 424 and the model that you then used in July 2022
4 to assess the proposals?

5 A. No, I cannot recall here what exactly was changed
6 along the way in coming up with the amended baseline.

7 Q. Is there a list that exists somewhere?

8 A. No.

9 Q. So if we -- what I'd like you to do is take a look
10 at page 63 of Hearing Exhibit 424, which is the official
11 March 2022 FAPRI baseline, and Table 2 of your written
12 report, which appears on page 5 of Hearing Exhibit 421.
13 And I'm not going to go through all the numbers, but if we
14 just look at the all-milk price, am I correct that for
15 purposes of this study you have done for -- start that
16 question again.

17 If we start with the Hearing Exhibit 424, the
18 official March 2022 document, we have an all-milk price in
19 2022 of \$22.04 as compared to the number that you used in
20 your analysis, which is \$24.85.

21 A. That is correct, for 2022. But 2022 is not one of
22 the analysis years, it's just really the starting off
23 point.

24 Q. So for 2023, the official FAPRI number was \$20, as
25 shown in Hearing Exhibit 424 for the all-milk price, and
26 you used, for purposes of your analysis, or your testimony
27 here, \$21.77, correct?

28 A. That is correct. And, again, I'll refer back to,



1 as you think to 2022, I believe when it was all said and
2 done, the 2022 annual average U.S. all-milk price would
3 have approached \$26. So we were moving up to much
4 stronger prices, and that's really the kickoff point
5 relative to that July update.

6 Q. Now, I take it that -- and just to complete that,
7 and then I'll ask a couple questions about it.

8 For 2024, just to compare one more set of numbers,
9 the all-milk price in the official FAPRI March 2022 report
10 in Exhibit 424 is \$19.13, and that's shown on Table 2 of
11 your report, Hearing Exhibit 421, page 5; you used \$20.34.

12 Is that correct?

13 A. That is correct.

14 Q. By my rough math, your assumption is 8.85% higher
15 for 2023 and 6.33% higher for 2024.

16 Does that seem about right?

17 A. I assume your calculations are correct.

18 Q. Okay. So, now, the assumptions that are being
19 used in the March 2022 FAPRI document, Exhibit 424, do
20 those go through some sort of what I'll call peer-review
21 process of some kind?

22 A. So the vetting process for that baseline will take
23 information about the general macro economy in this
24 country and around the world from what's now S&P Global
25 Market I believe at the time, when in 2022 was -- when
26 this baseline was done.

27 We will have a baseline review in December, that I
28 mentioned in my testimony, that would bring together



1 groups of industry and academic economists to review what
2 we dub our preliminary baseline. So it does undergo a
3 review process trying to come up with what's the most
4 realistic baseline we can with none of us knowing exactly
5 what the future looks like.

6 Q. I take it that your -- your July 2022 forecast as
7 set forth on Table 2 of Hearing Exhibit 421 did not go
8 through such a review?

9 A. That would be correct.

10 Q. All right. So the March 2022 FAPRI U.S.
11 Agricultural Market Outlook in Hearing Exhibit 424, that
12 is a deterministic --

13 A. That is not a deterministic outcome. That is the
14 average of the stochastic outcomes that you see reported
15 in that table -- table that's on page 63.

16 Q. Oh, Table 63 is the result of the stochastic?

17 A. It is the average of the stochastic outcomes.

18 Q. All right.

19 A. You can look at, for example, page 76 of that
20 document. Although there's nothing specific to dairy, you
21 see corn prices in what's the 90th percentile, the 10th
22 percentile, and then what's labeled as expectation as the
23 mean of the outcomes for corn prices.

24 This is always the struggle we have in doing
25 stochastic work of how to present this in a way that is
26 easier for those looking at these tables to understand it.
27 Trying to put all of the stochastic information in these
28 kind of baseline documents has been a struggle, just as



1 what's shown as Table 2 in my written testimony on page 5
2 is the average of the stochastic outcomes.

3 Q. And just to be clear, are you saying page 63 of
4 Hearing Exhibit 424 is a stochastic document?

5 A. Stochastic averages are being reported in that
6 table.

7 Q. I thought -- and I -- you're maybe going to tell
8 me I'm wrong -- I thought FAPRI sometimes published a
9 separate stochastic analysis, separate from the annual
10 U.S. Agricultural Marketing Outlook, of which Exhibit 424
11 is an example.

12 Is that wrong?

13 A. So the answer is, it depends. I'm a good
14 economist today here when I answer that one for you. But
15 we'll do an August update that is deterministic. So just
16 what's happening in current markets, it's much more
17 short-term in nature.

18 The document that we -- I'm sorry -- the baseline
19 that we put together that we call our preliminary baseline
20 that normally happens in November that we get reviewed in
21 December, is also a deterministic process. That's how we
22 get feedback on the deterministic baseline. What we turn
23 out in March, then, is the stochastic process.

24 Q. So I appreciate your clarifying that. A little
25 less clear on your website, perhaps, but in any event, I'm
26 sure you are right.

27 I think the bottom line, then, is that your
28 employment -- well, a bottom line is that your employment



1 of stochastic techniques to produce the July 2022 analysis
2 that you used for purposes of this hearing were not
3 intended to be a methodological improvement over what had
4 been done to create the March 2022 Annual Market Outlook;
5 is that fair?

6 A. That -- so that is correct. It's really just a
7 better update to the current situation relative to what we
8 set in March.

9 Perhaps the thing I would say is that having the
10 opportunity to have re-done the March 2022 baseline, maybe
11 we missed some things in what FAPRI was doing back when
12 they turned out that more -- back when we turned out that
13 March baseline. And really, July gave us a chance to
14 correct that before the jumping off and doing any of the
15 scenario work.

16 So baselines are never completely disentangled
17 from the scenario work that we're doing. So the better we
18 feel about the baseline, of which becomes the yardstick,
19 of which -- against which we'll measure these scenarios,
20 the better I feel about providing those kinds of changes
21 and results.

22 Q. But in this context here, use of the word "us" in
23 connection with the July 2022 analysis is reference to
24 you?

25 A. Yeah, yeah. So that should be a reference to me.
26 My -- so the FAPRI team gets me in the "us" mode
27 occasionally, but this is work that is my work.

28 Q. All right. Let me just switch to another topic.



1 I take it you have not performed any analysis at
2 all as to whether the National Milk proposals are,
3 themselves, desirable?

4 A. I only provide quantitative assessment, and I
5 really don't advocate pro/con for anything. So this is my
6 quantitative assessment of the proposals that National
7 Milk asked me to look at.

8 Q. You are not here as a proponent of the adoption of
9 any of these proposals; is that fair?

10 A. That is fair.

11 Q. So let me focus on one particular issue, which is
12 the proposed change in Make Allowances. Okay?

13 So -- and I just want you to take as a given, I
14 think the record is clear enough on this, that National
15 Milk's proposed changes to Make Allowances are, by
16 National Milk's own admission, not enough to increase the
17 Make Allowances to actually reflect the cost of
18 manufacturing. Accept that as a given. All right?

19 So tell me how -- how does your -- does your
20 model, the FAPRI model, or the FAPRI model as you have
21 used it in July 2022 through your changes, how does it
22 take into account cost of manufacture, if at all?

23 A. So we'll have equations that represent allocation
24 of milk fat and skim solids into the different
25 manufacturing processes. They are going to have a
26 combination of factors on the right-hand side that
27 describe the amount of milk fat and skim solids used in
28 different products, depending on input, output prices,



1 manufacture of whatever product we're talking about.

2 So they generally have some macro economic factors
3 that would relate to higher input prices in them.

4 Q. Well, I understand from your statement that the
5 actual sales price of finished products, that goes into
6 the equation; is that -- is that right?

7 Just ask you -- I'll just ask it as a flat-out
8 question. Does -- do the -- does the modeling incorporate
9 a projected price of finished products?

10 A. So we'll have wholesale product prices, yes.

11 Q. And it projects -- strike that.

12 Not projects, perhaps. It actually reflects what
13 quantities of milk or its components are used to make
14 those products; is that right?

15 A. So the equation is allocation of milk fat and skim
16 solids that depend on relative economics of the
17 manufacture of whatever process, yes.

18 Q. All right. And where, if at all, does the actual
19 cost of a processor to take those raw milk products and
20 turn them into a finished product, cheese being an
21 example, where does that enter into the equation, or does
22 it not enter into the equation at all?

23 A. Yes. So there -- again, there are some macro
24 economic drivers in some of those equations that would
25 be -- try to be reflective of some of the other costs of
26 manufacture in those products. So it's generally those
27 more macroeconomic cost factors, producer price indices,
28 that would help that allocation decision.



1 Q. And where, if at all, does the model capture what
2 the impact is of a regulated system that requires
3 processors of manufactured products -- I'm going to
4 oversimplify slightly -- but requires them to take
5 whatever they get for their finished product, say, a
6 40-pound block of cheddar cheese, deduct from that
7 whatever has been set by regulation as the Make Allowance,
8 and pay the rest over to farmers? What effect, if at all,
9 does it have on model results if the amount that the
10 processor is allowed to hang on to is less than actual
11 cost of manufacture?

12 A. So, again, we're looking at those relative input
13 and output costs, raw milk being part of that. So those
14 equations will give us that allocation based on, again,
15 what they have to pay for the inputs to manufacture
16 products that they are paid for on the other end.

17 Q. I mean, are you -- you are using the CPI index and
18 things of that nature to -- as a proxy for those costs; is
19 that what I am hearing?

20 A. So I wouldn't -- I wouldn't characterize it as a
21 consumer price index in this case. I would actually
22 characterize it as the producer price indices, and we'll
23 dig into the ones that are more reflective of what we
24 think the costs are for the manufacture of those products.

25 Q. And -- okay. That's -- I appreciate that
26 correction. You are quite right, consumer price index
27 would not have been the right number.

28 So you look at producer price index and things of



1 that nature to assess what the costs would be, correct?

2 A. Producer price indices, wage rates, it's a bundle
3 of those kind of other input costs that we include in
4 those estimates.

5 Q. And what -- how does the -- how, if at all, does
6 the model capture a situation in which the government has,
7 by regulation, capped the actual amount available to the
8 processor at a level lower than those various inputs would
9 suggest are the processor's actual costs?

10 A. So, again, that -- that -- the costs they have to
11 pay for the raw milk to also go into -- or the components
12 to go into whatever manufacture process, those are another
13 input.

14 And, again, we're not looking at the individual
15 processor in this case, we're looking at the allocation of
16 milk to the different manufacturing processors. And we
17 know that input and output prices are going to drive the
18 decision of that allocation across products.

19 Q. But, once again, I appreciate milk is an input,
20 too, and obviously you have to project the milk cost. I
21 understand that's, in fact, what you are doing in part.

22 But what, if anything, are you doing to assess the
23 implications for ultimate production of finished
24 manufactured products of a regime in which, by regulation,
25 the processor is being allowed to recover less than its
26 actual costs?

27 A. So I would, again, suggest that the economics here
28 are what we look at, and as the price they might have to



1 pay for that -- those products to manufacture whatever
2 output they want, those have -- as those costs go up, it
3 has downward impact on the allocation to that particular
4 manufactured product, just as increases in the dairy
5 product prices would be an incentive for them to produce
6 more products.

7 Q. Are you aware that raising the price of a finished
8 product simply increases how much the processor has to pay
9 the farmer and, in fact, leaves the processor unable to
10 garner any benefit from having raised its price?

11 A. I am. It increases the minimum price required,
12 yes.

13 Q. And -- and have you assessed to what extent your
14 model reflects the decline in production that results from
15 the inability of processors to obtain return on their
16 efforts?

17 A. So the equations will certainly give us back less
18 production of manufactured products when the economics are
19 less strong.

20 Q. But you're -- you're judging that economics based
21 upon things like producer price index, et cetera, correct?

22 A. So that's part of what drives it. Right? So the
23 big drivers here is, what's it cost me for the milk or
24 dairy products I'm putting in to get that manufactured
25 product out the other side and what am I being paid for
26 that manufactured product? Yes. Those are the big
27 drivers.

28 Q. And, I mean, so let's take an example. Let's



1 assume energy prices have gone up.

2 I assume energy prices must be part of the
3 formula, correct?

4 A. Correct.

5 (Court Reporter clarification.)

6 MR. ROSENBAUM: Must be part of your formula.

7 BY MR. ROSENBAUM:

8 Q. And so let's assume energy prices have gone up.
9 That would be reflected in your formula.

10 What, if anything, does your formula do to assess
11 whether or not the manufacturer, in fact, has any ability
12 to recover that extra energy cost given the regulatory
13 limit on the Make Allowance?

14 A. Yes. So this is, frankly, the beauty of a full
15 system of a set of equations, because you just set in
16 motion step one here of, let's take the assumption of
17 higher energy prices. So the very first effect of that in
18 the allocation would be to say, we're going to allocate
19 less milk to those manufactured products because costs
20 went up for the manufacturer.

21 What's that do at the retail level? Fewer retail
22 products available. It raises the retail price slightly.
23 I'm -- I mean, we can argue, it depends on the shift we
24 want to make here.

25 But then that feedback is simultaneous, then, back
26 to those allocation equations as well. So we're searching
27 for -- you know, you have really shifted the supply of a
28 manufactured product to the retail level by increasing



1 energy costs, and we're looking for that new equilibrium
2 that balances markets all the way from farm prices, to
3 wholesale, to retail prices. It is not a simple process.
4 We have to go through that entire set from farm to
5 consumers to find a new equilibrium.

6 But all else equal, you increase energy costs, and
7 will manufacture less products, and ultimately see some
8 higher prices as consumers see less product out there.

9 Q. Is the -- is the diminution in sales different in
10 the real world based upon whether or not you have the
11 ability, as you would for most products, to raise your
12 price to try to recover that increased cost, as opposed to
13 a regime in which, in fact, you -- talking about the
14 processor -- are unable to raise your price and thereby
15 recover that cost because you're required to pass on that
16 higher price to your farmers, so you net nothing from
17 trying?

18 A. So I'm not sure I followed the question
19 completely, but I will say I think the question you asked
20 me, if I'm a price taker, can I raise my prices? And I
21 eventually will say, in aggregate, we get supplies to
22 adjust, whether that's milk or of manufactured product,
23 and eventually that goes against aggregate demand to give
24 us some higher prices.

25 Q. But the demand reflects the prices, too, right?

26 A. It -- so it does. That demand function gives us a
27 schedule of consumption or -- or -- and I'll say total
28 consumption in this case -- we can say per capita, that



1 depends. As prices go higher, we get less consumption.

2 Q. Let me ask it a little differently. Some of the
3 agricultural products that you cover in the Agricultural
4 Market Outlook are not subject to regulation as to how
5 much the entity making the finished product must pay its
6 suppliers; is that right?

7 A. That would be correct. We could talk about cattle
8 markets not having a lot of regulatory burden between --
9 along the way, yes.

10 Q. Is the model changed for dairy to reflect the fact
11 that there are these Make Allowances which cap how much a
12 processor can recover?

13 A. Yes, to the extent that those minimum price
14 formulas, you know, make changes as we change wholesale
15 product prices. In those allocation equations, the
16 minimum class prices will be part of what drives the
17 relative economics.

18 Q. And is there a determination made as to whether or
19 not those changes are significant enough as to retard
20 production?

21 A. So generally, I answer yes to that. I -- I don't
22 know if you are looking for some point of a big change
23 that results or some cliff that happens. These models
24 tend to be fairly linear in their response.

25 I -- again, I would remind us that in this case
26 we're talking about aggregate response, not individual
27 processor response. And I think that's important to -- we
28 may find an individual processor that adjusts a lot more



1 than the aggregate situation might suggest as well.

2 Q. Well, presumably some material portion of all
3 manufactured products are subject to the restrictions of
4 Make Allowances that I described, correct?

5 A. You are correct.

6 Q. Let me ask you this. You, for purposes of your
7 analysis -- let me start by just repeating -- start that
8 question again, by repeating, and I'd ask you just to
9 assume this, you haven't been here for the whole hearing,
10 but --

11 THE COURT: Remember where you are. Let's take a
12 15-minute break. It's about 10:35, so please be back and
13 ready to go at 10:50.

14 (Whereupon, a break was taken.)

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

16 We're back on record at 10:51.

17 Mr. Rosenbaum.

18 BY MR. ROSENBAUM:

19 Q. Dr. Brown, if you could look at your written
20 report here in Exhibit 421 and turn to page 5, which
21 contains your baseline. The second entry on the page
22 under the heading U.S. Milk Supply is Milk Yields.

23 Do you see that?

24 A. Yes.

25 Q. And you show that milk yields will increase year
26 over year during that entire timeframe, correct?

27 A. That is correct.

28 Q. If you look at the last page of your exhibit,



1 Table 14, I was just struck by the fact that that table
2 which shows change from baseline, shows milk yields
3 declining from the baseline in years 2024 through 2032.

4 Now, they are small changes, but I was just
5 curious if you could -- if you have an explanation as to
6 why you think the National Milk proposals would actually
7 cause milk yields to go down a little bit?

8 A. Well, those are very -- so first off, I'll
9 respond, those are very marginal changes relative to the
10 baseline. But you are correct that they are slightly
11 down. I think when you look at those results, we're
12 probably in a situation where it depends on where the
13 growth in cow numbers occurred and what yields look like
14 in those areas relative to other areas that may have
15 driven milk yields down slightly under that scenario.

16 Q. I mean, you are showing production goes up by
17 200 million pounds in years 2028 through 2032, each year,
18 as compared to the baseline, and yet yields are dropping.

19 Does that -- as I say, very slightly, but I
20 just -- it -- it seemed a little bit of an anomaly.

21 A. So I think we're -- again, we're adding cows that
22 maybe are in places with lower average yields that's
23 resulting in that slight decline in milk yields.

24 Q. In terms -- switching topics to elasticities. On
25 page 3 of your written report, Hearing Exhibit 421, there
26 is Table 1 that shows the elasticity estimates of the
27 FAPRI dairy model.

28 Let me start by asking you: Are you the person



1 responsible for developing those elasticities or is it
2 somebody else?

3 A. So it's combinations of researchers in FAPRI that
4 we're working on estimations. But, yes, I have a part of
5 that as well.

6 Q. Are you the principal person for coming up with
7 elasticities for dairy or is that somebody else?

8 A. I'm responsible for the structure of the model
9 that we end up with at end of the day. Primary
10 responsibility, yes.

11 Q. Okay. Now, there's -- right underneath where it
12 says Table 1, there's something that says "Estimation
13 Period 1988 through 2018."

14 So I would like you just to explain to me what
15 that means.

16 A. Yeah. So when we think about the parameters that
17 we're estimating on the supply and demand side, we're
18 looking over that period of -- of 1998 through 2018 to
19 estimate those parameters. We are always in constant
20 evolution in these models; however, trying to maintain
21 some consistency across time and how they -- how it
22 analyzes policy changes is important for me, so I'm always
23 careful about how quickly to update those elasticities.
24 I'm more focused on areas of the model where we -- we have
25 done analysis where we feel like the model's come up short
26 in terms of answering the questions.

27 Q. But are you -- is it -- does that reference to
28 the --



1 (Court Reporter clarification.)

2 MR. ROSENBAUM: I'll start the question again.

3 BY MR. ROSENBAUM:

4 Q. Does the reference in Table 1 to an estimation
5 period of 1988 through 2018 mean that it is data from that
6 time period that is used to create the elasticities?

7 A. That is correct. So when I'm doing annual model
8 development, I have the tradeoff of how far back do I want
9 to go to get the number of observations to do estimation
10 versus getting far away from what we might consider the
11 current structure of the industry. So I have tradeoffs
12 there in terms of that estimation period, for sure.

13 Q. Have you personally performed any studies as to
14 whether COVID has -- and its aftermath -- have caused any
15 material shifts in consumer elasticities?

16 A. So I will say we look at changes of time periods
17 all the time in terms of the estimation that we go
18 through. That's both cutting off of the early period as
19 well as adding observations on the in period.

20 Can I specifically identify the effects of COVID?

21 No.

22 Have I been concerned about how quickly to
23 incorporate the data that's available for me in a COVID
24 period? Yes. Only because I'm not sure what the
25 longer-term impacts are of those changes, yet.

26 Q. But you -- your cutoff date is pre-COVID for the
27 data collection for purposes of making these elasticity
28 estimations; is that correct?



1 A. That's correct.

2 MR. ROSENBAUM: That's all I have at this time.

3 THE COURT: Mr. Rosenbaum, thank you.

4 Who next will cross-examine Dr. Brown?

5 MR. ENGLISH: Good morning, again, Your Honor.

6 CROSS-EXAMINATION

7 BY MR. ENGLISH:

8 Q. And good morning, Dr. Brown.

9 My name is Chip English, representative of the
10 Milk Innovation Group, which is primarily Class I.

11 And so I say that in particular because I will
12 focus on Class I issues. And I assure you that both your
13 counsel's additional direct and Mr. Rosenbaum's
14 cross-examination has significantly shortened what
15 otherwise would have been my cross.

16 So I find my recollection's fading over time, and
17 so I simply cannot recall. Have you testified in prior
18 Federal Milk Marketing Order hearings?

19 A. I have not.

20 Q. How does the FAPRI model measure consumer demand
21 for fluid milk?

22 A. We estimate a double-log specification that looks
23 at total consumption of fluid milk as a function of the
24 retail price of fluid milk, income, and I believe there's
25 also a negative trend term in that equation that's
26 estimated.

27 Q. A negative trend term meaning what?

28 A. A variable that's helping describe what's been a



1 continued decline in fluid milk per capita consumption
2 over the period.

3 Q. At the bottom of page 2 of your testimony you have
4 this statement: "The fat and solids not fat balances are
5 cleared using wholesale butter and nonfat dry milk
6 prices."

7 What impacts does that negative Class I trend have
8 on those balance clearings, in your mind?

9 A. Well, so those -- those milk fat and the skim
10 solids closing identities will always balance. Where --
11 you know, which products milk fat and skim solids go to
12 will change over time.

13 Q. And if -- if you agree the Class I demand has a
14 trend that's down, does that volume loss end up in those
15 fat and solids nonfat balances?

16 A. Yes.

17 Q. And where is that additional fat and solids nonfat
18 balances end up being sold?

19 A. In other manufactured products.

20 Q. Does it end up in the export market?

21 A. Certainly some of it could, yes.

22 Q. On page 3 of your statement, the very top, there
23 is a representation of Federal Milk Marketing Orders and
24 other federal policies.

25 Does that mean that the Federal Milk Orders are
26 taken into consideration in the model?

27 A. That is correct.

28 Q. And do you know what the USDSS model is?



1 A. So I'm not familiar with it in detail. But, yes.

2 Q. And do you know that it does not take into
3 consideration the existence of Federal Milk Marketing
4 Orders?

5 A. That's my under- -- my general understanding, yes.

6 Q. If FAPRI is a representation of Federal Milk
7 Marketing Orders and its underlying policies, do the
8 results of the model tend to reinforce the status quo?

9 A. No. I think what the representation is, is really
10 how we get from wholesale dairy product prices all the way
11 back to farm level milk prices through the set of formulas
12 that we have that determine minimums along the way.

13 Q. You don't think there's some circularity built
14 into the model based upon the existence of the
15 existence -- sorry, let me start over -- circularity built
16 into the model if you are applying the Federal Order
17 policy?

18 A. I don't think that when you think about applying
19 Federal Order policy it changes the behavior relative to
20 changes that one wants to make. It just imposes the
21 constraints that come with operating under a Federal Milk
22 Marketing Order.

23 Q. So looking at page 3 of Exhibit 422, your
24 PowerPoint, you say, "There's a state-level development on
25 the supply side, but demand for dairy products and fluid
26 milk occurs nationally."

27 Is the demand for fluid milk really national?

28 A. So I think one could argue that there's



1 differences as you move around the country.
2 Unfortunately, it's hard to find the data necessary to add
3 that complexity to the model. And so, thus, that's the
4 reason for the structure that you see.

5 Q. To the extent you know anything about the USDSS
6 model, does it not implicitly take into consideration the
7 differences -- or the differences in fluid milk demand?

8 A. I'm not aware.

9 MR. ENGLISH: Your Honor, could we provide a copy
10 of an exhibit to the witness? It's Exhibit 384, which is
11 American Farm Bureau Federation 5B, the maps they
12 introduced last week.

13 THE COURT: Yes. So I'm going to ask that the
14 record copy be provided to the witness while I get my
15 copy.

16 Tell me again the exhibit number, please?

17 MR. ENGLISH: It's Exhibit 384.

18 THE COURT: 384. Let's go off record just a
19 moment.

20 (An off-the-record discussion took place.)

21 THE COURT: We're back on record at 11:06.

22 Mr. English, the witness and the Judge each have a
23 copy of the Exhibit 384, AFBF-5B, as in boy.

24 MR. ENGLISH: Thank you, Your Honor.

25 BY MR. ENGLISH:

26 Q. So, Dr. Brown, I probably suspect you haven't seen
27 this document before; is that correct?

28 A. That would be correct.



1 Q. Let's turn to Figure 3 for a moment.

2 And so this has been admitted into evidence by
3 American Farm Bureau Federation, and according to them, it
4 purports to be the difference between current and the
5 National Milk Producers Federation proposed Class I
6 differentials.

7 Do you see that?

8 A. I see what they have said, yes.

9 Q. And do you see that they have used a color code
10 such that the more red an area, the greater the difference
11 between the current and National Milk in a positive
12 direction -- I'm sorry. I apologize.

13 Do you see that that -- actually, it's the green
14 that is the highest from the current to the proposed,
15 correct?

16 A. That's what the graph shows.

17 Q. But do you also see a fair bit of red increases in
18 the West? Do you see that?

19 A. Yes.

20 Q. I assume from what you have told us, that your
21 model takes into consideration the increase in the Class I
22 differentials throughout the whole country, correct?

23 A. That is correct.

24 Q. And to the extent some of those increases, say, in
25 the Upper Midwest at \$1.25, are in areas where there's a
26 very low Class I utilization -- do you know that, for
27 instance, that the Class I utilization in the Upper
28 Midwest is around 6%?



1 A. Yes.

2 Q. And to the extent you increase the Class I
3 differential in that part of the country by \$1.25, that
4 increase -- most of that increase milk is going to go
5 somewhere other than Class I, correct?

6 A. Correct.

7 Q. And -- and that ultimately will have an impact on
8 the prices as you show.

9 If you look at page 17 of Exhibit 422.

10 As I understand it, page 17 is the impacts of the
11 higher class of differentials, correct?

12 A. That is correct.

13 Q. And while you don't actually show the Class I
14 differentials here, I understand, because you are keeping
15 consistency around charts, all the formulas for Class I
16 mover, Class II, Class III, and Class IV, are lower in
17 every single instance, in every single year, with the
18 increase of Class I differentials, correct?

19 A. That is correct.

20 Q. And by definition, the fact that the Class IV
21 price, for instance, just using one example of 2023, is
22 down \$0.25, is because taken by itself, the Class I
23 differential increase will mean the Class IV prices are
24 going to end up going down from the baseline, correct?

25 A. That is correct.

26 Q. Which, taken to the next statement, means that
27 production changed in such a way that Class IV dropped by
28 \$0.25 per hundredweight, correct?



1 A. Additional milk supplies came on the market and
2 lowered the Class IV price.

3 Q. And whatever your conclusions about dissipating
4 rapidly for dairy farmers, the bottom line is, as to
5 Class I differentials, the impact taken by itself was
6 down, whether it was 2023 or 2032, correct?

7 A. I'm sorry, ask that question again, please.

8 Q. Looking at table -- looking at the table on
9 page 17, and going to your ultimate conclusion that the
10 changes in producer prices will rise in the short-term but
11 dissipate -- that increase will dissipate in the
12 longer-term, nonetheless, Class IV is down across the
13 board in every single year, correct?

14 A. Yes, that is correct.

15 Q. To what extent do you take into consideration the
16 cost to Class I handlers when decisions are made by others
17 to voluntarily associate with the pool or disassociate
18 with the pool, which impacts the level of the payment they
19 have to make into the producer settlement fund?

20 A. So we try to have that representation in our
21 Federal Order piece of the model. Depooling can certainly
22 be troubling for us to handle in a modeling framework. So
23 it's a simplification, probably relative to some of the
24 things that we have seen of late.

25 Q. And do you understand the problem I was trying to
26 get at, is that while the Class I processor may have an
27 announced Class I price, if depooling occurs such that the
28 payment to the pool increases, that the actual price the



1 producer -- that handler has to pay would exceed the
2 Class I price?

3 A. I understand.

4 Q. And you believe that is taken into consideration
5 in your model?

6 A. I do.

7 Q. I want to discuss, ever so briefly if we can, the
8 issue of elasticities. The only cross-elasticities --

9 THE COURT: Say it again?

10 MR. ENGLISH: Sorry.

11 BY MR. ENGLISH:

12 Q. The only cross-price elasticities I see that you
13 perform as shown in Exhibit 422, page 5, are for American
14 cheese and other than American cheese, correct?

15 A. You are correct.

16 Q. And going back just very briefly to some of the
17 questions Mr. Rosenbaum asked.

18 That means you have not performed any
19 cross-elasticities for fluid milk with, say, bottled
20 water, correct?

21 A. So there are currently no cross-elasticities in
22 that fluid equation, but it is total fluid consumption.

23 Have we looked at alternatives in the
24 specifications over time? Absolutely, yes.

25 Finding those alternative specifications where
26 cross-elasticities seem to help us, I have not, in an
27 annual kind of analysis, found anything that I felt more
28 comfortable with.



1 Q. In any event, the last year for which you have
2 done the analysis as reported here was 2018, correct?

3 A. Last year for the estimation of some of the
4 parameters that run the model, that is correct.

5 Q. And you try to keep them consistent.

6 So, for instance, you say you drop off the bottom
7 year and add new years, correct?

8 A. So it's an evolution, not a revolution.

9 Q. Right. Okay.

10 But the evolution, as I understand it, is 1998 to
11 2018; is that correct?

12 A. So it's currently -- we're estimating over 1988 to
13 2018.

14 Q. Just give me one second. As promised, I greatly
15 shortened my exam, and I thank you for your time. And
16 let's -- let's get the official version of 384 back to
17 USDA.

18 MR. ENGLISH: I thank you for your time,
19 Dr. Brown.

20 THE COURT: Who next has cross-examination for
21 Dr. Brown?

22 CROSS-EXAMINATION

23 BY MR. SMITH:

24 Q. Good morning, Dr. Brown.

25 A. Good morning.

26 Q. I'm Dan Smith with the Maine Dairy Industry,
27 representing the Maine Dairy Industry Association. I --
28 I'm extremely sensitive to not belaboring the hearing



1 process.

2 The purpose of my exam is two parts: One, just
3 clarify some methodology issues; and second, the primary
4 purpose is to see if there's a way to equate your
5 calculation of the all-milk price with a calculation on
6 the Federal Order producer statistical uniform price,
7 whether there is some possible way to do that. Again, now
8 I understand that those are big methodological issues, not
9 looking to get too deep into it, just to the level that we
10 can for purposes of the hearing.

11 A. Okay.

12 Q. So starting on page 4 of your Exhibit 421, just if
13 you -- if we might, we're on page 4, second paragraph in
14 the fourth paragraph. If you could just give kind of a
15 working definition of what you mean by exogenous data and
16 your stochastic baseline development.

17 A. Yes. So exogenous data would be modeled --
18 sorry -- would be data that the model does not project.
19 It would -- in some ways you could think of it as outside
20 assumptions that would be made in the model.

21 If you took the dairy model by itself, corn
22 prices, soybean meal prices, hay prices, alfalfa prices,
23 would all be exogenous. From there, income. So what
24 drives domestic demand is general income trends. We'll
25 have, then, deflators involved as well. On the export
26 side, we would talk about things like exchange rates.

27 So it's, again, those -- those data streams that
28 we're using to drive the set of endogenous, or variables



1 that the model predicts, that that, for me, is this
2 exogenous model description for you.

3 Stochastics, I always struggle with the --

4 Q. Let me just -- with regard to the exogenous data,
5 where does the Class I -- the class prices in the class
6 utilizations, are they considered to be exogenous data in
7 the model then?

8 A. They are not endogenous to the model.

9 Q. Did I say "endogenous"? I meant, ex- -- ex- --
10 are they considered to be exogenous?

11 A. No, they are not.

12 Q. They are --

13 A. Endogenous.

14 Q. -- endogenous?

15 A. Yes.

16 Q. Meaning that you don't predict them --

17 A. No, no, meaning I do predict them.

18 Endogenous are things that the model predicts.
19 Exogenous, things outside of what the model predicts.

20 Q. So the class prices, you are predicting the
21 changes in the class prices over time and changes in
22 utilizations over time?

23 A. Correct. So if you looked at -- if you looked at
24 Table 2 on page 5, you would see, you know, Class II,
25 Class III, Class IV, those are predicted.

26 Q. So even the data -- those data for 2022 are
27 predicted data from the model as it has moved in the past
28 to that, rather than the actual ones?



1 A. So we'll use actual up until the current data, and
2 then the model, forecasting forward, will predict those.

3 Q. So over time you replace the predictions with the
4 actual?

5 A. Absolutely.

6 Q. Okay. Got it. That's very helpful.

7 Now, if you could move to the stochastic baseline,
8 what that function is.

9 A. Yes. So the second question, harder, I think, for
10 me to describe very well, so I'll do my best here to help.

11 So, number one, I always -- we often start with
12 this deterministic baseline, so point estimate. So I
13 predict the price is X in this year. That is the
14 deterministic process.

15 The stochastic process, as we describe it, then
16 says, you know what? All that exogenous data, we know
17 there's a distribution around that exogenous data, so
18 let's go draw from different exogenous factors.

19 So I always go, for me, the weather is one of the
20 easy ones. So if it's dry, we know we get higher feed
21 costs. So we're going to draw from the distribution of
22 what weather looks like as a way to add a distribution
23 around milk prices.

24 So if weather is dry, we know milk yields are
25 probably less. All else equal, that gives us a higher
26 price, so we're on this side of the distribution. And
27 we're doing that 500 times.

28 Sometimes I go, think of it as we're running 500



1 unique other outcomes based on this conditioning draw from
2 the distribution of exogenous variables. And in some
3 cases, we may decide we're going to draw from the error
4 terms of some of the equations. Remember, we tend to do
5 OLS estimation for those equations, so we know those OLS
6 equations have errors associated with them. We'll take a
7 random draw out of that distribution of those error terms
8 as well.

9 So if I think about demand, you know, we know it's
10 driven by own-price, cross-price, and income. That's kind
11 of our basic economic logic. Yet, we know there's also
12 this other consumer taste in preferences. We don't -- we
13 don't have a good measure of that, so we know that still
14 probably lies out there in the error term, so maybe we're
15 going to draw from that error term on some of the consumer
16 demand equations.

17 I say "maybe." We -- this is a little bit of us
18 choosing which of those exogenous events we want to draw
19 from. It gives us a stochastic outcome that we feel is
20 wide enough for what we're trying to get accomplished.

21 But -- but that process, again, randomly draw --
22 now, we hold correlation, so we know that some of these
23 variables that we're drawing from exogenously have
24 correlation between them.

25 So if I draw a -- if I draw a -- I'm trying to
26 think of a good example here. If I draw weak income,
27 that's going to be potentially correlated with some of the
28 other macroeconomic effects I'm drawing from. So I want



1 to make sure that I keep that correlation in the error
2 draws as well.

3 And so that's -- that's a simple explanation of
4 what we go through in developing our stochastic baseline.

5 Q. And then that result is 500 individual projections
6 that you then plot out and then devise some sort of mean
7 or -- or of that?

8 A. So we'll look at the mean. We'll look at the
9 distribution of those. Oftentimes you will find that
10 we're reporting the mean of the stochastic outcomes, just
11 because trying to find other ways to report that data gets
12 complicated, and it -- I don't think it always illuminates
13 as well.

14 For me, the stochastic process really helps me
15 identify the times where the bet's not equal. It's not a
16 normal distribution when it's all said and done.

17 Q. And the net result is Figure 1, correct?

18 A. Correct.

19 Q. Okay. Okay. And in between there, a final kind
20 of clarification question -- general.

21 On page 9 of your testimony at the bottom, you
22 indicate that -- with regard to the Class I differentials,
23 but it seems to be an issue with a structural design of
24 the model.

25 "The Class I differential changes are analyzed on
26 an order-by-order basis."

27 And this is more the point: "At the supply side
28 structure, the model only includes state-run supply and



1 incorporates how each state is affected by the numbers."

2 So does that -- does that mean that the model is
3 structured not to include the different Federal Order pool
4 data and the impacts on Federal Order pooling in -- in the
5 calculation of changes in milk production over time; is
6 that correct?

7 A. So that is not correct. It will incorporate that,
8 going from state by state, so I need to go this state's
9 delivering to which orders.

10 Q. Okay.

11 A. And that's the connection between order by order.
12 And then what I'm saying about a state all-milk price,
13 those price linkages exist in the model.

14 Q. So translation: Milk production in the state of
15 Maine goes -- stays instate, goes to Massachusetts. The
16 model captures both of those supply changes. And if -- in
17 an order where production in one state goes among many
18 orders, that's captured as well?

19 A. That is correct.

20 Q. Okay. Okay. Moving now to your summary dairy
21 baseline table on page 5.

22 The first category is milk supply. Milk
23 production in 2022 is the actual data now, right? You
24 have captured for the year?

25 A. It is. There may have been a slight adjustment.
26 So remember that this was done in mid-2022. USDA probably
27 didn't have its final milk production --

28 Q. So we're essentially dealing with actual --



1 (Court Reporter clarification.)

2 THE WITNESS: So when you look at 2022, it was the
3 most current reported USDA data in mid-2022. I won't say
4 there hasn't been revisions that USDA's made to that final
5 data between when this was done and today. They will be
6 minor, but think of it as 2022's history.

7 BY MR. SMITH:

8 Q. The reason for my interruption -- and I
9 apologize -- the qualification, the main point is actual
10 data?

11 A. Yes.

12 Q. Okay. So we have, in milk production pounds
13 total, 226.4 billion pounds of milk. And obviously,
14 that's a lot more than the Federal Order.

15 So if you could just -- the -- the -- identify the
16 volume, if you can, that's pooled milk versus non-pooled
17 milk?

18 A. So I don't have that data sitting in front of me,
19 so I'm not sure I can illuminate too much further. I
20 recognize there's a lot of milk outside Federal Orders,
21 but I don't remember the exact.

22 Q. Do you have a ballpark of what it is or --

23 A. I don't have a ballpark.

24 Q. Okay. Okay. Okay. So then moving to the second
25 category on the summary table, and this is more of the
26 gist of my questions, I'm trying to calculate out how the
27 model devises the all-milk price from -- which is the last
28 line of the second category, from the minimum FMMO class



1 prices.

2 So you have, in that category, you have the mover,
3 and then the Class II, Class III, and IV prices. If
4 you -- if you -- for 2022, again, you know, with your
5 qualification real data here -- I mean, not real -- actual
6 data, not projected, the all-milk price at \$24.85 is
7 greater than the calculation of any of those individual
8 prices. So obviously, a statistical uniform blend price,
9 however you characterize it, is not just drawn from those
10 prices. There is more -- are more data included in there,
11 and if you could just identify what those are to begin.
12 And you don't have to get too deep, just basically how
13 we're going to get to the all-milk price.

14 A. Yeah. So we will see minimum blend prices by
15 order. And, again, we're going to then map from those
16 minimum blend prices to the state all-milk prices.

17 It's not a one-for-one. No linkages exist there.
18 And for states that have delivering to multiple orders,
19 we're going to try to incorporate that into what
20 ultimately becomes a state all-milk price, to the U.S.
21 all-milk price that you see here, it's a weighted average
22 by production in each of those states to some -- I
23 shouldn't say some -- but to average to a U.S. all-milk
24 price estimate.

25 Q. So there have to be other data besides just the
26 prices in there.

27 Class I differentials, I would assume, are
28 additional?



1 A. And -- and, yes. And we're going to look at
2 the -- you know, how much is -- is different class
3 utilization that affect, then, ultimately what translates
4 into a state all-milk price.

5 Q. But would there also be state over-order prices
6 included in there?

7 A. So not explicitly. As much as I might like to
8 have more over-order price data, it's a little limited in
9 terms of what I have available to me publicly to use. And
10 so, just remember, it's not a one-to-one mapping from the
11 Federal Order prices to the state all-milk prices. So we
12 at least indirectly allow for those things, for those kind
13 of over-order premiums to exist.

14 Q. And regulated and market, same issue?

15 A. Correct.

16 Q. So then the primary driver of the -- how you net
17 out a positive -- a higher all-milk price then -- then the
18 regulated prices would be the Class I differentials across
19 the orders?

20 A. That -- yes. That would certainly be critical,
21 yes.

22 Q. And that's enough to account for the nonregulated
23 milk in the system as well?

24 A. As best -- as best we can do it in the model.

25 Q. Okay. Okay. So now to the final table on page 22
26 of your statement, which is the change from the baseline
27 accounting for all of National Milk's changes. And here I
28 have -- I do have a question that's more a bit of a



1 challenge, I would have to say, as opposed to primarily
2 trying to understand.

3 In the first category, you show, which has been
4 described previously, the increase in milk production over
5 time is one-tenth of a billion pounds, 100 million pounds,
6 correct? 100 million to 200 million pounds. And so for
7 2023, at 100 million pounds were against 225 billion
8 pounds of milk, right? That's -- that's the net change;
9 is that correct?

10 A. Very small change. You are correct.

11 Q. So -- but the -- the net result to the classified
12 price is quite significant. So if you could just explain
13 how an increase -- so the basic dynamic that you described
14 at the beginning of your testimony is that the supply and
15 demand dynamic we're involved with is that an increase in
16 milk production is going to result in a decrease in
17 prices.

18 So how does the 100 million pounds of increased
19 milk production against total production of 225 billion,
20 even if you account for that's not all regulated milk, how
21 do we -- how do we have a drop of the Class II price and
22 the Class IV price \$0.74 a hundredweight?

23 A. Yeah, so I think you have to look back at each of
24 the individual five of those --

25 Q. Yeah.

26 A. -- to make that kind of calculation.

27 And -- and I was just looking here for a minute.
28 So from a Class I differential increase, you know, for



1 example, in 2024, a \$0.31 decline in the Class II price.
2 If you looked at Class I mover, it's an \$0.08 lower, in
3 this case, Class II price. So you got to look at those
4 individual outcomes to -- to make that conclusion.

5 Now, again, how do we get a \$0.09 increase, let's
6 say, in 2023, in the U.S. all-milk price when you see the
7 class price is declining? It is higher Class I
8 differentials. That is part of the answer to that
9 question.

10 Q. So -- and I tried to do that. And it seems if you
11 add up the differentials barrel price, those net
12 increases, I'm not sure it totals out, that's the only
13 thing. We have to take the model for what it is, but if
14 that's the explanation, okay, that's the answer to the
15 question that I posed. Thank you.

16 A. Yeah.

17 Q. Okay. So then final question and back to the
18 beginning. So if we have a calculation of all of the
19 changes that National Milk is proposing in aggregate,
20 results in the change in the all-milk price 2023, \$0.09,
21 moves down to \$0.02, and then back up to \$0.03, that's the
22 net run of the model total, correct?

23 A. That is correct.

24 Q. So if you could just, to the extent that you can,
25 how does that equate to the calculation of a statistical
26 uniform price, a producer pay price under the Federal
27 Order? That's my last question.

28 A. Yes. So, again, I think it's very similar in



1 terms of the calculation. Again, we're looking at, for
2 each order, the Class I through Class IV price is the
3 utilization in those prices to come up with what I would
4 call a uniform blend price, translating that, then, into
5 those state level all-milk prices to come up with what
6 happens in each of the states.

7 Q. Is that the work back through the states to get to
8 a calculated price for the -- an order that includes those
9 states?

10 A. Yeah. So I think so. Sorry for not being clearer
11 in my response here.

12 Q. No, no.

13 A. But we're talking about going from wholesale
14 prices and working our way back all the way to what's then
15 ultimately state all-milk prices through the Federal Order
16 set of formulas that -- that, again, generates the
17 connection between wholesale product prices at the
18 national level and what we're saying about state all-milk
19 prices.

20 Q. So the point being that the model is not just a
21 calc- -- is not just running the calculated blend price,
22 it's accounting for the downstream sales, and then that
23 feeds back into the price calculation?

24 A. It is. And in a simplified fashion, yes, it is.

25 Q. Okay. Thank you very much.

26 MR. SMITH: That's all I have.

27 THE COURT: There's no cross-examination of
28 Dr. Brown?



1 So this is very fundamental, but I just want to
2 make sure I understand this before I invite questions from
3 the Agricultural Marketing Service.

4 When I look at your Exhibit 421, page 6, and at
5 the top of the page it refers to the 2024 Stochastic U.S.
6 All-Milk Price. I don't have that figure completed, but I
7 looked at your slides where it is completed; is that
8 correct?

9 THE WITNESS: Those should be the identical.

10 THE COURT: All right. I'm just going to approach
11 you, if I may. So I'm looking at your slides, and I find
12 page 8, the picture that I don't see on the testimony on
13 page 6.

14 Do I have an imperfect copy?

15 THE WITNESS: You do have an imperfect copy.

16 THE COURT: I wonder if the record copy is
17 perfect.

18 MS. TAYLOR: Your Honor, we did notice that
19 earlier, and we have asked National Milk to provide the
20 record copy with the colored print of the graphs so they
21 show up. I believe we have an extra copy to give you so
22 that you have that, and the record copy is correct.

23 THE COURT: Mine is not only lacking color, it's
24 lacking --

25 MS. TAYLOR: It's lacking ink.

26 So what's online is correct, the record copy is
27 correct, and we'll make sure you have a correct copy.

28 THE COURT: Very good. That's -- that's --



1 there's one other, just to make sure. If you will turn to
2 page 9 of your testimony, page 421. Mine isn't nearly as
3 helpful as yours.

4 THE WITNESS: So, again, we're missing -- yeah.

5 MS. TAYLOR: We'll fix it.

6 THE COURT: All right. Good. As long as the
7 record copy is complete, I'm happy. But, I mean, yes, I
8 want one of my own. All right.

9 Is there anything further then before I turn to
10 the Agricultural Marketing Service questions?

11 There is not. So I invite questions by
12 Agricultural Marketing Service.

13 CROSS-EXAMINATION

14 BY MS. TAYLOR:

15 Q. Good morning, Dr. Brown.

16 A. Good morning.

17 Q. Thank you for being here today. It seems like
18 this hearing is bringing out all of the dairy economists
19 around the country. You are not the first one to speak,
20 and I don't think you will be the last one here to
21 testify, so I do appreciate you coming out to offer
22 evidence into the record.

23 A. Thank you.

24 Q. Our job at USDA, since this is your first hearing,
25 is to kind of ask questions to clarify what you did and
26 make sure we understand the terms so we can go back and
27 use this in decision-making. And we can't call you later
28 and ask you a question to define something, so now is our



1 only opportunity.

2 With that context, I'm going to try and keep
3 things logical, and I might flip back and forth between
4 your two exhibits just to make sure I asked all the
5 questions on the same topic.

6 So I will first start on page 2 of your testimony,
7 which is Exhibit 421. And in that, you talk about how
8 your FAPRI model is a structural economic approach.

9 And I was just wondering, can you define what you
10 mean -- it means for a model to be structural in nature?

11 A. So I think in that description it is what are the
12 important decision points contained in the -- that are
13 part of the dairy industry, and let's make sure we model
14 that structure with individual equations that represent
15 the underlying structure as best we can of the industry.

16 Q. Okay. So looking at the totality of the --

17 A. Correct. Think about it as a system of equations
18 trying to provide the results, not just an individual
19 piece of what's going on in the industry.

20 Q. Okay. And on that page, and you talked a little
21 bit with Mr. Smith on state-level prices and how that
22 feeds into Federal Order prices, and you talk about that
23 on page 2.

24 I wondered if you could speak a little bit more
25 about that relationship in the model. And another
26 question I had was, in particular for states that might be
27 in multiple orders, how did you account for that?

28 A. Yeah. So the second part of your question, states



1 in multiple orders, we were looking at the most available
2 data to us about where a particular state's milk was
3 headed, and we incorporate that in coming up with their
4 state all-milk price estimate. So if I'm a state X and
5 50% of my milk is going in Order 1 and 50% is going in
6 Order 2, we'll take the weighted average of those two to
7 come up with what ultimately then drives that state
8 all-milk price.

9 Not ideal, but that's the best -- because again,
10 we're in a situation where, then, some of those states
11 would have had unregulated milk as well. We're still
12 trying to drive off of what we have kind of calculated as
13 the best estimate of where that milk's being delivered.

14 We're calculating those order blend prices to then
15 come up with, how do I want to push those into state
16 all-milk prices? I wish I had over-order premiums in some
17 cases. Back in the old days that might have been a little
18 more readily available than it is today.

19 So you are really then talking about linkages that
20 you hope have enough flexibility to account for what we
21 know is, in some cases, over-order premiums that change
22 over time. But we -- it's the toughest, one of the
23 toughest parts of trying to close that model down is to
24 get from what we're doing on Federal Order prices to
25 ultimately the state all-milk prices that drive the supply
26 side of the model.

27 Q. Okay. Later on in the page you talk on the demand
28 side of the model about equations for American-type



1 cheese, other than American cheese, butter, nonfat dry
2 milk, fluid milk products, and milk fat and solids not fat
3 used in other products.

4 Just had a question on the protein side of things.
5 There's not a separate protein equation?

6 A. There was not. So we are balancing on milk fat
7 and skim solids only in what we do.

8 Q. Okay. And then turning to the next page 3, and I
9 think you talked a little bit about this with Mr. English.
10 You say that Federal Orders are represented in the model.

11 Just wondering if you can elaborate on how that's
12 done, and does that include things such as pooling
13 provisions, order boundaries, other things other than
14 just, you know, class prices?

15 A. So we're really just trying to map those class
16 prices through. So our representation of Federal Orders
17 are fairly elementary relative to how they might operate.
18 I have looked at times of whether we could do more on the
19 supply side to actually talk about milk supplies in each
20 of the Federal Orders, but the state-by-state approach
21 seems to have been, you know, the best approach for us
22 thus far. It's where, again, I would love to see more
23 data available to make the linkage from national demand
24 through the orders to what's happening state by state, but
25 we just don't have -- in my mind, have enough of that
26 actual USDA reported data to make all those conditions
27 that I might want to make in a perfect model.

28 Q. Uh-huh. I think our economists can be sympathetic



1 with trying to model Federal Order provisions.

2 Let's see. Later down the second paragraph here
3 on page 3 of your statement, you say, talking about
4 exports, and they're estimated as a function of the
5 difference between world and domestic dairy product
6 prices. And given changes in dairy product exports, world
7 prices are --

8 (Court Reporter clarification.)

9 MS. TAYLOR: I apologize.

10 BY MS. TAYLOR:

11 Q. Your second sentence says, "Given changes in U.S.
12 dairy product exports, world dairy prices are allowed to
13 adjust."

14 And I -- could you just elaborate on how that
15 works?

16 A. Yeah. So we have a couple of things at play here.

17 And so, number one, we have estimated reduced form
18 equations for the quantity of U.S. dairy product exports
19 leaving the U.S., and those depend primarily on internal
20 versus world prices and exchange rates.

21 But at the same time, we also have, in the FAPRI
22 system, a global dairy model. So I'm able to go in and
23 shock that model by changing the amount of U.S. exports of
24 dairy products and saying what's the impact on world
25 prices as a result of that. So you almost impose the
26 behavior of the global system to give us a representation
27 of when we say, hey, under this scenario, we want to
28 export more or less products, that we get the world



1 response that our global model would give us had we
2 incorporated it in.

3 We don't still stochastically do the global models
4 at this point, it's just another level of detail, but
5 that -- that's the way we're trying to mimic what's
6 happening in the rest of the world as trade becomes more
7 and more important for the U.S. dairy industry.

8 Q. So, for example, if the U.S. government decides to
9 change policy and to encourage more exports to be -- to go
10 out of the country and had a goal, you could say, if we
11 actually met this goal and exported X amount, this is what
12 would happen, I can forecast what would happen to prices?

13 A. Correct.

14 Q. Let's see. Okay. I want to turn to slide 4 of
15 Exhibit 422, your Table 1. I think it is also on page 3
16 of your testimony, 421.

17 You talked a little bit about the elasticities
18 that are in the model.

19 Can you define what is a short-run and what is a
20 long-run in elasticity?

21 A. Yeah. So thank you for that.

22 So short-run would be the annual response on the
23 supply side. So if we looked at that Table 1 on page 3 of
24 the written testimony -- and, again, I'll take the -- what
25 we labeled as the south states. It's a .05 elasticity in
26 the first year.

27 So what we know is, the long-run -- so when I say
28 long-run elasticity, it's at -- when all the adjustments



1 happen. So this is taking the lag-dependent variables.
2 So in our cow number equations, we say cow numbers in this
3 period is a function of last period's cow numbers and then
4 economics.

5 That lag-dependent variable, you take one over
6 that lag-dependent variable, multiply it by the short-run
7 elasticity, that's your long-run elasticity.

8 It actually, then, just multiplies those -- that
9 effect through time to tell you the ultimate long-run
10 response. And so that's why it's larger, because the
11 lag-dependent variable is going to feed through -- a
12 change in cow numbers that you make the first year feeds
13 through in what your year two looks like, and keeps
14 feeding through.

15 Q. It's dynamic in that way?

16 A. That is correct.

17 Q. Another just point of information I wanted to get
18 on the record. It looks like your supply elasticities
19 appear to be relatively inelastic.

20 And just if you might explain why that would be
21 given the current structure of the industry?

22 A. Yes. I might even add to relative very inelastic,
23 and I think I said inelastic so that we got it correct.

24 But I think when you look at the structure today,
25 you know, we have a pretty big capital investment on a lot
26 of these operations. And when I think about kind of
27 aggregate supply response, if you will, when somebody
28 builds a nice new big dairy milking facility, that



1 facility has to be milked at 100% efficiency, probably, if
2 it's going to last long-term.

3 If that facility gets in financial straits, that
4 individual producer might have to exit, but somebody else
5 is probably going to milk in that facility because the
6 bank that held the loan against it is going to try to sell
7 it for some portion of the original investment to get as
8 much back out as they can, and we keep milking cows in it.

9 So I would argue as we become more
10 capital-intensive in the -- in the investment end,
11 buildings and facilities to run a dairy operation, the
12 individual supply response may not look all that
13 different, but the aggregate supply response is becoming
14 much less responsive, because once we make the investment,
15 it doesn't go away.

16 Q. So carrying that thought forward, you know, you
17 look through all the results that came out of the model,
18 and it seems to be -- and I'll generalize -- it's a shock
19 in the beginning, the first year or two, and then it
20 moderates over time.

21 And based on what you just said, I would say,
22 well, that's because maybe somebody goes out of business,
23 but somebody comes in and, you know, milks cows, and cow
24 numbers keep going up, because there's so much capital
25 involved.

26 So I mean, can I draw that conclusion from what
27 you just said as to maybe why we see things seem to
28 always -- in your analysis, the results really do moderate



1 in the long-run?

2 A. So perhaps, Erin, that's -- that's a part of the
3 answer to the question. But I'd also say, you know, you
4 are making these shocks, you are getting response to those
5 shocks. And over time, unless you are doing some policy
6 change that -- that makes the market not come to an
7 equilibrium, or an equilibrium different than if you were
8 completely without policy, we're going to tend to try to
9 drive back towards that longer-run equilibrium to -- to
10 the point you were trying to -- I think trying to make
11 here, I'll say, I think it's changed behavior of how we
12 respond on the supply side a lot, in that when there's
13 good returns, there's money available to expand operations
14 fairly quickly, and when it's tough economic times, at
15 best, we swim sideways.

16 We aren't seeing the same reductions historically
17 in milk supplies that we would have seen in periods of
18 tough economic times, as maybe we did in the past. So
19 I -- I think that has a lot to do with why we see a supply
20 side, again, that's much more inelastic.

21 Why do we see -- why do we see the effects washed
22 away? To me, that's the industry still just adjusting to
23 the changes in policy. And as long as the policy itself
24 doesn't inflict long-term change that you can't undo, you
25 move back toward that long-run equilibrium.

26 Q. Okay. Thank you.

27 In your table you have a fluid milk elasticity of
28 negative .12, and I think I just wanted to make sure I



1 gathered from other cross-examination, that's an
2 inelasticity that's in your FAPRI model based on your
3 long-term work in that model.

4 And you haven't seen any new data or information
5 yet you are comfortable with that would cause you to
6 change that estimate?

7 A. That's correct.

8 Q. Let's turn to slide 7. Actually, let's turn to
9 page 6.

10 I wrote a note that I heard you say, in response
11 to some question, and I -- I think I got it correct, you
12 said if you were forecasting, you wouldn't use models like
13 this.

14 So I wrote that down, and as to why do you say
15 that?

16 A. So I -- I think it's tough to have -- so if I was
17 really good at this and the model that I have together
18 today was a perfect forecasting tool, I wouldn't be here.
19 I would be retired somewhere.

20 Q. On a beach.

21 A. I never -- on a beach, not in cold weather. So --
22 so thus my flippant response to, I wouldn't use the model
23 to forecast. I don't trade on the CME based on what this
24 model says because that would certainly get me in trouble
25 at times.

26 Any model that we have is a simplification of
27 reality. When you have an industry that's as inelastic as
28 the dairy industry appears to me to be both on supply and



1 demand, it just means very small errors in what you might
2 think about supply or demand can translate into pretty
3 huge shifts in prices. So just about the time you are
4 projecting prices higher, they go lower.

5 Now, do I think it's a good way to think about
6 this longer-term baseline approach? Yes.

7 Do I want to be a fairly accurate forecaster?
8 Yes.

9 I think part of that is, then, how do you get
10 expert opinion in to help the model behave or perform even
11 better in constructing that baseline?

12 Our baseline review process has gone on ever since
13 I started in FAPRI in 1987, and it is a very
14 behind-the-scenes, down-and-dirty, all the experts that we
15 can find to say, what have we done wrong? What's the
16 model not performing very well? And we get beat up
17 sometimes about things that maybe it hasn't done so well.

18 But that process of constructing, to me, then,
19 distinguishes it from a forecast. Just trying to get a --
20 and I want an accurate representation of the future as
21 best I can do it, so that when I take that yardstick and
22 then measure the scenarios, I feel comfortable with the
23 change, because that's really what I'm after at the end of
24 the day. When I peel that piece of policy or change that
25 piece of policy, is the change still accurate? Or if I
26 want to put it into percentage terms, is it somehow biased
27 because of the baseline that I chose? I want to avoid
28 that as best I can.



1 Q. So better to look at it in maybe the direction and
2 the magnitude rather than the number?

3 A. Yeah. I don't disagree with that assessment of --
4 I'm happy to get the direction, and I hope I have a pretty
5 good shot at the magnitude. But direction is as important
6 as anything here.

7 Q. Okay.

8 MS. TAYLOR: So, Your Honor, I have a bit more,
9 and it's about noon. So I'm wondering if we might just go
10 ahead and take a break, before we get into the details of
11 other scenarios, for lunch?

12 THE COURT: Now, our farmer witnesses are still
13 waiting to testify, correct?

14 Mr. English, will everything be fine if -- if --

15 MR. ENGLISH: I don't know how much USDA still
16 has, but I think if we start by midafternoon, the
17 statements aren't very long from the dairy farmers. I
18 think we're going to be okay.

19 MS. TAYLOR: Yeah, I'm not going to go excessively
20 long by any means. I'm just looking at the time and
21 thinking it would be an accurate time.

22 MR. ENGLISH: I continue to believe we're going to
23 be okay, Your Honor. One of the dairy farmers -- I'm not
24 going to try to stretch this out, but Mr. Sumners says he
25 just has to be on the road tomorrow by noon, whereas
26 Mr. Carson and Mr. Shockey have to be on the road by, you
27 know, 5:30. So they are the only ones that absolutely
28 have to get on today. I would like to get all three of



1 these witnesses, essential witnesses, on.

2 I have a pretty good sense of how long these
3 things take. I think we're going to be fine.

4 THE COURT: Good. All right. I think this is a
5 wonderful time to take our lunch break. Please be back
6 and ready to go at 1:00 p.m.

7 We go off record at 11:59.

8 (Whereupon, the lunch recess was taken.)

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1 WEDNESDAY, DECEMBER 6, 2023 - - AFTERNOON SESSION

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

3 We're back on record at 1 o'clock.

4 Is there anything preliminary to the Agricultural
5 Marketing Service continued examination?

6 There is nothing.

7 You may proceed.

8 BY MS. TAYLOR:

9 Q. Welcome back.

10 A. Thank you.

11 Q. I want to turn to slides 7 and 8, and this
12 corresponds to the text, I think, that's on page 4 of your
13 testimony, which is Exhibit 421.

14 So slides 7 and 8 look at deterministic and
15 stochastic, and I was wondering if you could tell us the
16 difference between the two.

17 A. Yes. So the deterministic baseline, I often say,
18 well, that's the point estimate. Year by year, it might
19 be considered what's your best single point estimate of
20 what the future looks like. And I -- I describe that as
21 the deterministic process. Single point, year by year of
22 all the important endogenous variables.

23 Stochastically, page 8, then says, we know there's
24 some distribution around that point estimate. There are
25 risks and uncertainties that we're not going to capture in
26 an economic model. So I want to draw from those risks and
27 uncertainties. I do want those draws to be correlated, so
28 when I think about the factors that are outside the model



1 that could make milk prices higher or lower, I want to
2 draw from a set of those in a way that -- that they do
3 stay correlated. Some errors won't be very correlated;
4 others will be very correlated.

5 This is an opportunity to look at how policy,
6 then, works across a spectrum of potential outcomes. Low
7 milk prices, high milk prices; low milk supplies, high
8 milk supplies. I think when you pick a single point
9 estimate, you are open to missing some of the nuance that
10 happens when we're talking about policy that might be
11 one-sided or the other.

12 And so when you look at the stochastic graph
13 that's on page 8, you know, so number one, I'll first say,
14 you look at that cumulative density function, and if I
15 would have -- would have put it as a probability density
16 function, it would look very normal, frankly. It would
17 look pretty bell-shaped.

18 That doesn't mean that we still can't use that
19 information in a way of, as I change policy, is that
20 policy outcome also distributed in some normal fashion or
21 is there a tail to it that matters?

22 In the things that I have analyzed, you know,
23 here's where the higher-of versus the average plus \$0.74,
24 the discussion needs to look at the range of outcomes.

25 I think when the 2018 Farm Bill was being
26 developed and folks decided to move to the average plus
27 \$0.74, they did not expect the volatility that we saw
28 after that period of time that made that move not seem



1 very palatable for producers.

2 I don't think there's a single formula one can
3 pick that's going to work perfect in all times, but being
4 able to at least analyze across that says, hey, there are
5 times where using the higher-of may be the higher -- may
6 give us a higher return.

7 I think the other point here is more volatility
8 that we have tended to see in markets. Now, maybe we're
9 not going to see the same volatility that we saw during
10 the COVID period in recovery, but I want to know how
11 policy works in those volatile periods of time because I
12 think it makes better policy for us at the end of the day
13 if we think about all of the potential implications across
14 a lot of different market outcomes.

15 So although we call this a stochastic baseline, I
16 sometimes, you know, will say, it's 500 alternative runs
17 that look at changes from what's the most likely or
18 deterministic baseline that gives us that kind of fuller
19 explanation when you think about it from a Farm Bill
20 perspective.

21 Again, government costs very rarely is equally
22 distributed. You are working on one tail or the other.
23 And back in the day where all of us were only doing
24 deterministic baselines, one could, if you will, game by
25 setting parameters that weren't triggered
26 deterministically, and when you do it stochastically, you
27 get a better flavor of what that looks like.

28 Q. Okay. Speaking of the volatility you just



1 mentioned, we have heard a lot of testimony over this
2 entire hearing about what everyone seems to be, like, what
3 kind of shifts around 2017, where you saw more volatility
4 in the market, and that seems to have continued.

5 And for your analysis, looking back historical, on
6 historical data, there's not a lot of data, you know, on
7 this current time period.

8 So I was wondering if you could, and I don't know,
9 talk about, just react to that, that information that's
10 been provided to us, and how that impacts, or wasn't able
11 to impact your analysis?

12 A. So I think there's a couple of things at play here
13 that -- to discuss under that scenario.

14 So number one, when we're looking at estimating
15 parameters over a long historical period, have we somehow
16 missed the true response in either supply response or
17 demand response from the parameters that we have
18 estimated? I -- I worry a lot about that particular
19 issue, to the point that we spend a lot of time looking at
20 alternative specifications that shorten up the estimation
21 period. I'm going to give up degrees of freedom that I
22 want statistically to see how my parameters adjust if I
23 shorten the period.

24 I haven't seen anything that yet makes me go,
25 yeah, we fundamentally need to work on this. I'm not
26 convinced I'm to the finish line of that work. I'm -- I
27 was -- I don't think that finish line ever exists. These
28 models always will adjust.



1 For me, to the -- to the volatility, I have said a
2 few times now -- so we have had a lot of what people will
3 dub black swan events that have affected the industry, and
4 I don't want to downplay that I think we have had some
5 that we could have never predicted. However, I think the
6 structure of many of our ag industries, dairy included,
7 has become less responsive on both supply and demand.

8 And I say that because you stand those supply and
9 demand curves straight up and down, for those of us that
10 are economists, and all of a sudden small changes in
11 supply or small changes in demand gets big swings in
12 prices.

13 I don't want to confuse the black swan events with
14 what I think is a continued structural shift that makes us
15 generally less responsive as participants in the industry.
16 And I think policy has to -- to account for what I believe
17 is a little less responsiveness for -- by both sides of
18 this industry today.

19 Q. So maybe I could summarize in a non-Ph.D.
20 economist way: Everyone's getting used to the volatility,
21 so they don't react as quickly maybe as they would have at
22 this point?

23 A. And probably don't have the flexibility to react
24 as quickly as maybe in the past. Again, I'll go back to
25 the supply side. Once I'm invested in that facility,
26 frankly, I have no choice but to milk in it at 100%.

27 This idea that, oh, you know, it's -- economics
28 are worse, I'm going to milk at 90%. I think most



1 everyone would say that doesn't work in the operation, so
2 I got to go at it full bore. And then, if I financially
3 come to the end of the rope, it's not like that facility
4 goes away. It's -- it's likely resold, as long as it's
5 still somewhat modern, and it's milked in again.

6 I think you could say the same kind of capital
7 intensive nature occurs almost at every segment along the
8 way of the dairy industry, so I think all these -- all
9 that just points, again, to a lot of this straight up and
10 down, and so we miss the volatility that we're going to
11 continue to see as we move ahead.

12 And I think it's important as we think about any
13 kind of reform to the Federal Order system that we
14 understand that we're likely going to deal with more
15 volatility and not less, and that's important to make sure
16 whatever -- wherever we end up, we think about it as it
17 relates to volatility.

18 Q. Okay. I was wondering on page 8 in your slide,
19 this is the stochastic baseline, if you could just walk
20 through kind of what exactly the graph is showing us.

21 A. Yeah. Yeah. So thank you for letting me try to
22 be a little more layman in terms of what I talk about.

23 So if you think about this line, right? So, in
24 fact, that line has 500 dots to it, and you just can't see
25 them because they are so close together. So it's the 500
26 different outcomes sorted from lowest milk price to
27 highest milk price.

28 If I take what's labeled on the horizontal axis as



1 51, observation 51, that tells you 10% of my observations
2 of milk prices roughly occurred at \$16 or less. All
3 right? So there's a 10% chance we could be below \$16.
4 Every single one of those gives us, then, ten percentiles,
5 if you will. So when you get to 251, that's going to
6 roughly give us back the average that we saw on the
7 deterministic side.

8 It also says there's a tail up there, the last 10%
9 on the very right-hand side of my -- of the graph that
10 says milk prices could be \$25 or higher.

11 Now, I think some look at those tails and go,
12 those tails are too big. We have never seen almost \$10
13 all-milk. When we got almost \$26 in 2022, it made my
14 right-hand tail at least look a little better. I want
15 tails that are bigger than what we have actually
16 experienced because I know there's probability outside the
17 ends.

18 Now, if we have \$11 all-milk, I bet that goes with
19 \$2 corn. So what's the likelihood of \$2 corn happening in
20 front of us? Probably not big, either. But it just
21 reminds me to say, you know, feed costs matter in terms of
22 what the milk prices are that we get back out of that
23 scenario.

24 But that -- that graph is meant to represent here,
25 sorted from the lowest price to the highest price, the
26 different levels of milk prices we're looking at when we
27 examine this on a stochastic basis.

28 Q. Okay. Thank you.



1 And then do you have confidence intervals around
2 the results that you show for each of the different runs?

3 A. So we don't have confidence intervals around
4 those. So we don't draw on everything we can draw on. So
5 when I say a stochastic baseline approach, it's somewhat a
6 subjective stochastic baseline approach. I'm picky, the
7 things that I think are most important to draw from in
8 terms of the exogenous data. That has been by working
9 through drawing on different things, what's important to
10 draw on. And if I draw on another variable, how much does
11 that increase the distribution?

12 If I was going to be critical of what we have
13 done, those confidence intervals should grow as we go
14 through time, because we're less certain about price
15 projections in 2032.

16 Well, I'm certain about one thing in 2032, they
17 will be wrong. But the fact that as we go through time,
18 those confidence intervals, if I was to try to calculate
19 them, should go higher, and we don't tend to see that out
20 of the approach that we have taken.

21 Q. Okay. All right. I wanted to turn to -- let's
22 see. Let's go to slide 10.

23 So we have heard a lot of talk over the course of
24 the hearing, again, some people estimate that the National
25 Milk changes in Make Allowance would result in a \$0.50
26 impact in the first year, and your analysis would forecast
27 a \$0.30 impact.

28 I think I know why, but for the record could you



1 talk about why would we see this difference?

2 A. Yeah. So I actually opened my written testimony
3 to page 12 as well to go along with this discussion.

4 And so at the very bottom is an easy answer to
5 that question. If you just put the Make Allowances in,
6 you are right about the 50-some-odd cents. But when you
7 look at Table 4 at on page 12 of the written testimony,
8 you will see in 2023, for example, cheese prices are \$0.02
9 higher. So the already beginning of less supplies of milk
10 generates higher wholesale product prices, offsets the
11 simple calculation of what happens when you increase the
12 Make Allowances.

13 Q. Okay. So the \$0.50 is just looking at the one
14 piece of the puzzle, where your analysis is looking at --

15 A. It's the response to that single piece of the
16 puzzle. How do all the market participants respond to
17 then what's the start of the shock of increasing the
18 Make Allowance? And we get product prices that move
19 higher as a result, so it moderates those impacts.

20 Q. So I want to turn to the discussion on the barrel
21 cheese proposal, which is on slide 11, and I think the
22 written part starts on page 7.

23 And you talk about, you use the relationship
24 between the block and barrel cheese prices between 2000
25 and 2022. Kind of, as I mentioned before, you know, we
26 have had evidence in the record of how those prices have
27 become much more volatile than, say, the last six to eight
28 years.



1 And so I am wondering if you could just opine a
2 little bit about how what that might mean in reality
3 versus maybe what the analysis is showing us?

4 A. And so it's a good question. I would probably
5 turn to page 12, the slide that looks at the change in the
6 Class III price scenario, let's baseline for a minute to
7 say, when you think about the last few years, you're
8 probably at the right side of that -- of that figure, so
9 not at the full. And so if one wanted to cut down to the
10 more current period where we have seen a bigger
11 difference, I think I would start to describe it by
12 looking at the right-hand side of that figure to get a
13 better reflection of the impact.

14 Q. So on slide 13 you were talking about the Class I
15 mover. And in your discussion, which is on page 8, your
16 written testimony, you talk about how the differences
17 since 2020 between the Class III and IV prices have tended
18 to be more extreme.

19 How would you define extreme in how you have used
20 it?

21 A. So I guess just bigger differences between
22 Class III and Class IV. We have seen more times where
23 they maybe haven't moved in a similar direction, more of
24 late. And I think when you look at the graph that's on
25 page 14 of my presentation -- so, again, let's -- let's
26 stop long enough to -- what the heck does that gold line
27 really mean that's there?

28 So when we looked at the 500 outcomes in 2024



1 only, it would say in some cases, it's a Class III price
2 that runs nearly \$6 below the Class IV price, and in other
3 cases, the Class III price that's running \$6 above the
4 Class III price. So those tails I think is where we have
5 been finding ourselves more often as we've looked at the
6 last few years.

7 I'm not sure whether -- I say that is -- those
8 extremes continue in front of us or not, but I want to
9 know how picking a Class I mover is affected depending on
10 where I'm at in that distribution of Class III versus
11 Class IV. My hunch is, had we done this kind of work ten
12 years ago, there would be a lot less variability in this
13 line in the difference between Class III and Class IV
14 prices than what's sitting here today for the analysis.

15 Q. So could we think of it as though -- because
16 things are getting more volatile, we will see less normal
17 distributions of outcomes as you do an analysis like this,
18 because it's taking that volatility and variability and
19 it's showing up in the tails?

20 A. So I -- I don't know that I can, with the model,
21 give you the answer to that question. My gut tells me
22 that, yes, we probably do see that variability where we
23 get things moving differently, a little less in lockstep
24 than maybe what we have seen historically. But from a
25 modeling standpoint, I'm not sure that I have anything
26 that really addresses that question very well.

27 Q. Okay. Can I ask why you -- the lines are at \$1.48
28 and minus \$1.48?



1 A. So it's the \$0.74. So if we think about what the
2 current --

3 Q. Oh.

4 A. -- about what the current average plus 74, it
5 tells us, you know, where do we get outside of where -- so
6 within the bands of minus \$1.48 to plus \$1.48, the average
7 plus \$0.74 would return a higher Class I mover, get
8 outside those bands, the higher-of would return a higher
9 Class I mover.

10 Q. Okay. Thank you. Our Class I mover discussion
11 was so long ago, that I forgot that 1.48 was important.

12 So if I move to slide 15, and this is where you
13 have these bar charts, can you just tell me what the
14 numbers on top of the columns, the bars represent?

15 A. Yes, sorry. So those are the Class I mover prices
16 on average for each of the bins of 100 outcomes. So in
17 the case of bin 1, so these would be the lowest Class III
18 less Class IV prices, of the difference between Class III
19 and Class IV. The Class I mover under the average plus
20 \$0.74 would have returned 17.54 on average across those
21 hundred observations, whereas under the higher-of it would
22 return \$18.68 per hundredweight.

23 Q. And just so I want to make sure we're clear. When
24 you say the "lowest," it's the lowest of the number of
25 observations. So if we go back to that chart, it would be
26 the first hundred in that distribution?

27 A. That is correct. It's lined up. So the first
28 hundred of this previous chart would equate to those



1 average Class I movers.

2 Q. Okay.

3 A. And the same bins go across. Sometimes I think
4 it's easier for folks to understand the binning of let's
5 do a hundred at a time instead of all 500. These charts
6 really tell the same story.

7 Q. Yep. These look at the averages.

8 Would there be a difference if we looked at the
9 median? Or -- and I think you talked a bit in some
10 discussion about why you chose to look at averages versus
11 a different method, but just curious about that.

12 A. So they will be different. I don't see them
13 significantly different in most cases. I mean, you can
14 really turn back to a slide like 14 and say, how normally
15 distributed are my outcomes? They are fairly normally
16 distributed. I think it's going to give us a mean and
17 median that are very close to each other in that case.

18 Q. Moving to the updating the skim solids component
19 that's on slide 16.

20 I just want to be clear. I think you mentioned
21 it. You just looked at the initial change. You were not
22 able to look at any subsequent changes National Milk has
23 proposed?

24 A. That is correct.

25 Q. I wanted to spend a bit on the Class I
26 differentials to kind of understand what you did.

27 So when I look at this chart on slide 17, it has
28 the same categories to be consistent with the other



1 charts. Well -- well, first I see the Class I mover as
2 lower, so I'm curious about that.

3 But as -- as a follow-up, I'm guessing that the
4 all-milk price at the bottom reflects the differential
5 increases that aren't necessarily reflected in these other
6 four categories, and I wanted to see if I was correct or
7 not about that?

8 A. So you are correct. And, again, when you see a
9 U.S. all-milk price in 2023 that's \$0.17 higher than the
10 baseline under that scenario, you know the Class I
11 differential increase was enough to offset what were lower
12 Class I mover, Class II, Class III, Class IV.

13 And so perhaps I -- I should have changed and put
14 a Class I milk price in that top row so it was a little
15 clearer about what -- what's happening, but Class I
16 differentials increase enough that you are offsetting now.

17 Again, why are these class -- minimum class prices
18 moving lower? When you have \$0.17 higher all-milk price,
19 you get some supply response to that, so additional milk
20 supplies push those regulated minimums lower. And to me,
21 this is yet another reason why when you are doing this
22 system approach, you recognize that there's -- the first
23 step, right? Raising Class I differentials. But that has
24 implications to producers in terms of additional milk
25 supplies. And that simultaneity of finding the new
26 equilibrium is what this modeling process, I think, is
27 best at doing.

28 Q. Okay. And these numbers on here, just to make



1 sure everybody -- the record's clear, they are not point
2 in time. They are average, 500 -- the average of 500
3 different observations is what gets you this, for example,
4 negative \$0.22 in the Class I mover in 2023?

5 A. Yes. So we could probably pull out one of the 500
6 and show a little different result than the average of the
7 500. But, yes, these represent the average of the 500
8 outcomes.

9 Q. So our Class I differentials, as you know, are
10 county specific.

11 So I was just wondering if you could expand on how
12 are you -- how did you account for that in the model?

13 A. Yes. So I go order by order and -- and tried to
14 figure out what an average Class I differential change was
15 for each of the orders based off of the county information
16 that National Milk supplied to me. That -- that's my
17 starting point, since I don't do county-by-county kind of
18 information.

19 Q. Okay. On page 10 of your statement you have a
20 sentence in there, let me see if I can find it. It's
21 right in the middle of the page, and it reads, "The
22 combination of the five individual changes are nearly
23 linear, but some of the interactions between the five
24 individual changes result in some very minor
25 non-linearity."

26 So could you expand on what you mean there?

27 A. So in simple terms, if I looked at the very last
28 table in the PowerPoint presentation, so page 18, if I



1 took the average of the first five lines, if I was
2 completely linear, I would get this -- the overall change
3 in the U.S. all-milk price, putting them all together.

4 And I think just as you layer them on one at a
5 time, it's not completely linear, so you -- how you pick
6 and choose which of the -- these five you might want to
7 analyze, you will get slightly different answers. I just
8 wanted to make sure I made the point that, you know,
9 pretty much the model's linear so it doesn't matter, but
10 there's a little bit of nuance there that we have some
11 non-linearity. We have endogenous variables that are
12 divided by other endogenous variables. It creates a
13 little bit of non-linearity in the model.

14 To some comments that I think were made off the
15 record late yesterday about models blow up. Non-linearity
16 is a great way to have a model that does not behave very
17 well when it gets into extreme outcomes.

18 Q. I have heard that many times from our economists
19 in the Department, so I understand that. Okay. Thank
20 you.

21 I wanted to ask you a couple of other questions
22 that aren't necessarily based on your direct testimony.
23 But I wanted to talk about -- and you mentioned it a
24 little bit -- about how when the mover discussion happened
25 with the 2018 Farm Bill, nobody thought what would -- you
26 know, we would have a pandemic or whatever and things
27 would turn out the way they did with that change.

28 So I guess the question is, considering all your



1 observations, I mean, what sort of conditions aren't --
2 maybe aren't we foreseeing now that would result in --
3 that's a pretty loaded question, but you are up here, so
4 I'll ask, right? So we have recent experience of things
5 not necessarily turning out for some parties the way they
6 wanted, and because we didn't think something would
7 happen, so...

8 A. And I think it's equally important to remember,
9 when we first went to the higher-of, I don't think anybody
10 truly understood the potential positive implications from
11 a higher Class I mover. I think we glossed over a little
12 bit of what the higher-of really meant to us at the end of
13 the day. What are we missing?

14 I often say, could you please ask me in 2032 what
15 the formula should have been for the Class I mover? I
16 will know with certainty what we should have done. All
17 right?

18 So now, this is, how do we create something that
19 most avoids some of the things we didn't like going
20 through COVID? And I don't have a good answer to that
21 question. I'm glad this is one for AMS to get to grapple
22 with as they look ahead. And I would just remind everyone
23 that the crystal ball is not always clear when you are
24 trying to figure out where those markets move in front,
25 just at least to acknowledge that we need to look at these
26 over a range of potential outcomes is important. And
27 everybody in the industry is going to like outcomes that I
28 think help us reduce some volatility that we have tended



1 to see.

2 Q. You mentioned that you think some people -- some
3 of the positives, what you determined positives in the
4 change in the mover, got lost.

5 Wondering if you could expand on that thought --
6 lost in the discussion?

7 A. Yes. So I guess my point being raised back when
8 we were doing reform in 2000, I think it was almost a
9 foregone conclusion, oh, we should use the higher-of III
10 and IV for the mover. And I'm not sure we did the same
11 kind of backward-looking, what would that have meant
12 historically. And so I think we underestimated the
13 potential bump we got when you got to pick the higher of
14 the two. Some might have said, well, that's pretty close
15 to the average of the two, and it's been anything but
16 that. And it's gotten more volatile. It's gotten even
17 where it's even much more important about whether you are
18 using the average over the higher-of.

19 But I -- I -- I always go hindsight is going to be
20 absolutely 20/20 in this case. And here's another one
21 where, although I think a few of us might have suggested
22 some very outlying observations that folks should have
23 thought about during the 2018 Farm Bill, that decision was
24 probably made before we could -- and -- and many people
25 weren't focused on just how wide those price differences
26 could be, because they hadn't really happened historically
27 very often. And I remind myself of history is not
28 necessarily a good predictor of the future.



1 Q. We have a number of proposals that are being
2 offered with delayed implementation, one of those being a
3 Make Allowance proposal that would phase in. There's also
4 talk of delaying implementation of changes because of risk
5 management, to take that into account, that people use
6 more risk management.

7 So I wanted to ask based on your experience, your
8 opinion on how a delayed implementation could alter
9 expected results, and does the fact that you know there's
10 going to be a change a year from now, and you -- let's say
11 as an example, and you know what that change is, are you
12 able to -- would you expect people to moderate their
13 behavior that then might kind of moderate actually what
14 happens because they have had more time to adjust?

15 A. So if you give people more information that they
16 can make better decisions for longer-term, absolutely they
17 are going to start to thinking about ways they can adjust
18 to what's coming in front of them.

19 If you think about this idea of stepping into
20 change, sometimes I say, well, perhaps that affects the
21 path. It's a little less bumpy out of the gate, you know,
22 you look at the results of the scenarios I have run, the
23 biggest effects are what? Year one results.

24 So if you think about ways to implement them
25 across time, maybe you smooth that out a little bit. But
26 it doesn't affect, frankly, where the long-run side of
27 this comes out, it just affects the early path for me in
28 terms of thinking through what that means.



1 Q. My last question, and it's been discussed with
2 other cross-examiners about your elasticity assumptions in
3 your model. And we talked a little bit about that. Just
4 wondering if you might talk a little bit about how changes
5 to your elasticity assumptions would change the results.
6 I mean, as you mentioned, everyone makes assumptions, and
7 you can find numbers -- but I don't want to say that word,
8 that's not what I mean by any stretch -- but you pick a
9 number and you get a result.

10 A. So I generalized in a couple of ways. So if -- if
11 you tend to have models that are more elastic, you are
12 going to get less price response as adjustments try to
13 happen. You're going to need a bigger product, a bigger
14 supply change, or a bigger demand change to try to get
15 balance. The more inelastic you are, the bigger the price
16 change you get for a given level of supply response. So
17 it's critical. It's critical to the answer to the
18 question.

19 Let me say, again, that as economists we all live
20 in a little bit of a soft science world. I -- I do not
21 throw stones at anybody that -- that, you know, might
22 necessarily approach this idea of what are the correct
23 elasticities differently. But I think it is impossible to
24 point to one study to say, this is the right elasticity,
25 without a lot more scrutiny over time.

26 So I -- I do like this idea of, I want to look
27 across the literature to see what everybody is saying
28 about elasticities as I look at what our model says



1 relative to what else is out there in the literature. But
2 this is -- this -- the results that you see today are very
3 much driven by the elasticities that we have sitting in
4 the model.

5 I'm happy that they look mighty close to what the
6 Economic Research Service does in their own model, because
7 those two models look awful familiar, and perhaps some
8 discussion with AMS staff in the past that have built
9 these kind of models, they also seem to be somewhat
10 consistent. Now, maybe we're all wrong with those
11 elasticities, but -- but it gives me a little bit of hope
12 when we're all trying to do some similar things that we
13 tend to find similar answers.

14 Q. I think that's all from AMS.

15 MS. TAYLOR: Thank you for your time today.

16 THE WITNESS: Thanks.

17 THE COURT: Mr. Rosenbaum.

18 CROSS-EXAMINATION

19 BY MR. ROSENBAUM:

20 Q. Steve Rosenbaum, International Dairy Foods
21 Association.

22 I would assume that the emergence of a new
23 competitor might have -- in anything -- might have a
24 material effect on elasticities for a given product,
25 correct?

26 A. The industry is always going to be adjusting, yes.

27 Q. But, I mean, there can be some new form of
28 competition that a particular segment in the industry has



1 never faced before that all of a sudden becomes a real
2 competitor, right? That could happen?

3 A. I suppose that scenario could play out.

4 Q. Did you -- have you read the 2023 study that was
5 published by three authors, including one from USDA, that
6 basically concludes that, for example, plant-based
7 beverages are a substantial competitor to fluid milk, and
8 studies that concluded otherwise have -- have failed to,
9 if you will, address the real competitive world that milk
10 now faces?

11 A. So, yes, I'm aware. This is to my point of, I
12 like to look across all the different studies that are out
13 there. That's one that, again, would be worthy of
14 including, but I want to look at the range of what's out
15 there as I think about what's appropriate elasticities.

16 Q. I mean, I assume that if you looked at any study
17 done more than -- I'm going to pick a rough number -- ten
18 years ago, probably would have been no contemplation of
19 plant-based beverage competition. Would you agree with
20 that?

21 A. That is certainly one of the new things that we
22 face as we think about competition relative to fluid milk.

23 Q. Let me -- and your ultimate conclusion is the
24 National Milk proposals would raise all-milk prices
25 modestly; is that fair, when you consider all the factors?

26 A. Modestly in the early period, but very modestly as
27 you go further out in the analysis period.

28 Q. But, I mean, that -- the reason for that result,



1 in part, is the Make Allowance changes they are making,
2 correct? I mean, that's one of the factors that you are
3 including in your ultimate conclusions, right?

4 A. So my analysis is analysis of their proposals,
5 yes.

6 Q. Right. Okay. So I'm not suggesting, you know,
7 you did this, but, I mean, it certainly was open to them
8 to pick a Make Allowance proposal that would come up with
9 a rough result like this if that's what their goal was,
10 right?

11 A. So perhaps I -- it's -- I think it is a good
12 opportunity to say, you know, when this work all started,
13 it was about one or two phone conversations between me and
14 Jim Slepser and Peter Vitaliano with National Milk, that
15 they said, "Hey, we want you to analyze; here's the
16 assumptions we want you to make." That was the last time
17 I heard from them until I delivered the results.

18 So it wasn't a, "Hey, let's look at these
19 Make Allowances, and then maybe I'm going to give you a
20 different set." I only had one set of Make Allowances to
21 look at at that entire time --

22 Q. But I mean, they are -- they are --

23 MS. HANCOCK: Your Honor, if he could just not be
24 interrupted and let him finish his answer.

25 MR. ROSENBAUM: I thought he was finished.

26 BY MR. ROSENBAUM:

27 Q. Go ahead if you have more to say.

28 A. So, again, this wasn't a hunt-and-see approach



1 to, run this first set of scenarios; hey, we might want to
2 give you a different set of Make Allowances. Those were
3 one-and-done, if you will.

4 Q. Right. I mean, obviously, they are Ph.D.
5 economists themselves, right?

6 A. Yes.

7 Q. Okay. So I mean, my question is, if they -- if
8 someone came to you and said, "We want you to run some
9 scenarios and we want you to include a Make Allowance of
10 X, and the Make Allowance, as has been discussed, is going
11 to be the cap on how much a dairy processor can
12 receive" -- because everything over the cap they have to
13 pay the farmer -- "and we want you to assume a
14 Make Allowance that represents a materially lower amount
15 than the actual cost of making the product," would that
16 strike you as a reasonable thing to do?

17 A. So I think the response here is, we can run
18 through the model alternative assumptions for things like
19 Make Allowances. We have equations that try to predict
20 how milk allocation unfolds as you run different
21 Make Allowances. It's not the model's objective to say,
22 well, this is good policy or bad policy. It's really just
23 to quantitatively assess the impacts, and that's really
24 what I have been trying to provide in my work back to
25 National Milk.

26 Q. And so to follow up on that, there's no suggestion
27 here that the Make Allowances that underlie the results
28 you achieve --



1 (Court Reporter clarification.)

2 BY MR. ROSENBAUM:

3 Q. There's no sense in which the Make Allowances that
4 you are using in your models are appropriate or not,
5 correct?

6 A. There are assumption changes that I'm making to
7 see what the impacts on the industry is from alternative
8 Make Allowances.

9 Q. And I mean, do you, as a -- as an agricultural
10 economist, have a view as to whether Make Allowances
11 should, in fact, reflect the average cost of producing the
12 product?

13 A. I -- so I think the difficulty in this discussion
14 is what is the average cost of Make Allowances, and part
15 of what the discussion is here about what's appropriate.
16 Given that we haven't changed them for decades, perhaps
17 that's the reason why we need some adjustment.

18 But that -- that, to me, is -- is the important
19 piece of the puzzle of what I bring as the quantitative
20 assessment without saying, I advocate for these or I don't
21 advocate for these. This is what the model generates that
22 I have used for a long period of time to look at a number
23 of policy alternatives.

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

25 THE COURT: Agricultural Marketing Service
26 microphone on, please.

27 //

28 //



1 CROSS-EXAMINATION

2 BY MS. TAYLOR:

3 Q. I just have one quick question as we noticed going
4 through this.5 I'm on any of your results tables, and under
6 wholesale prices it says, "Nonfat dry milk" --

7 THE COURT: Slow, slow, slow, please.

8 MS. TAYLOR: I get so excited.

9 BY MS. TAYLOR:

10 Q. It says, "Nonfat dry milk, AA."

11 What does the "AA" stand for?

12 A. So I think that's a misquote -- or a mistake in
13 the determination of what that nonfat dry milk price is.
14 It's an old double Grade A price --

15 Q. Okay.

16 A. -- but not what we're using today. It just got
17 left over on the left-hand side.

18 Q. Okay.

19 A. We're using survey prices.

20 Q. Okay. So the other ones have "CME" after them.

21 A. Yeah, yeah. So they all should suggest survey
22 prices, not --

23 Q. Oh, NDPSR prices?

24 A. Yes. My -- my -- thank you for clarifying.
25 That's my mistake.

26 Q. No problem.

27 MS. TAYLOR: That's all I have. Thanks.

28 THE COURT: Ms. Hancock.



1 MS. HANCOCK: Thank you, Your Honor.

2 REDIRECT EXAMINATION

3 BY MS. HANCOCK:

4 Q. I just have a couple of questions, Dr. Brown.

5 There was some discussion about when you ran your
6 model results in January there might have been some
7 changes after that in the 3100 counties that came out of
8 the model results.

9 Can you opine on whether those changes would have
10 had any material effect on the model results as you have
11 run them?

12 A. So I think it would depend on the magnitude of the
13 results, but I -- I guess I probably wouldn't expect big
14 changes from what I saw in the set of Class I
15 differentials that I ran.

16 Q. I want to -- Mr. Rosenbaum talked with you about
17 Exhibit 424, and that's the March 2022 U.S. Agricultural
18 Market Outlook.

19 I'm wondering if you could just give us a little
20 bit of context to know, when do you start compiling the
21 information that gets reported in that March of 2022
22 report?

23 A. Yeah. So we actually really start that
24 development process in about October of 2021.

25 That would be first to construct a preliminary
26 baseline; that would occur in November.

27 In December, we tend to then have a review from
28 other ag economists, other stakeholders about that



1 long-term baseline.

2 We will then come back in early January and run
3 the final baseline. That first cut of the final baseline
4 would be a deterministic process.

5 And then after that is finished in January, we
6 come back in February and we'll talk about adding the
7 stochastic component to the baseline.

8 And then make that delivery to Congress sometime
9 in early March.

10 Q. And if we look at page 63 of Exhibit 424, you're
11 reporting in this March of 2022 report, you have an
12 all-milk price that's reported for 2021, and then
13 forecasting in 2022, and then forecasting out until 2031;
14 is that right?

15 A. That is correct.

16 Q. And so when you are running those numbers, you
17 don't yet know what 2023 is going to be yet; is that fair?

18 A. And that is correct. We were running this in
19 2022, so 2023 was purely a forecast almost 12 months into
20 the future when this was done.

21 Q. So you forecasted, at least in Exhibit 424, a
22 baseline of \$20 for the all-milk price for 2023; is that
23 right?

24 A. That's correct. We did pretty good.

25 Q. It turned out it was a little higher than that,
26 though; is that right?

27 A. So -- so 2022 actually got higher. We would have
28 ended up 2022 with in excess of \$25 all-milk prices. So



1 remember, we were in 2022 when we were making that '22
2 forecast, so we weren't very good with the current year.
3 We did much better in 2023.

4 Q. Okay. So 2022 ended up being more than \$3 higher
5 than what you have included in Exhibit 424?

6 A. That's correct.

7 Q. And is that one of the numbers that was updated
8 with National Milk when you were running the modeling for
9 National Milk?

10 A. Yeah. Yes. So when you look at the graph of the
11 deterministic milk price that's on page 7 of the
12 PowerPoint presentation, you now see 2022 sitting nearly
13 \$25 per hundredweight, which was really getting us much
14 more close to what the current situation was, or that we
15 thought it was going to be for all of '22, and we were
16 doing this baseline in July of 2022.

17 Q. So at anytime when you were having conversations
18 with National Milk, Dr. Vitaliano and Mr. Sleper, or
19 anyone else with National Milk, did anyone at National
20 Milk ever provide you any subjective input that you should
21 include in the baseline?

22 A. No.

23 Q. And so was the only input that you received was to
24 make sure that whatever baseline you used was the most
25 updated and accurate based on objectively measurable
26 numbers?

27 A. That is correct.

28 Q. At any time did you ever cherry-pick data or



1 disregard any data or model results because it was
2 unfavorable to National Milk or its proposals?

3 A. No.

4 Q. As you sit here today, do you have an
5 understanding as to whether National Milk tried to use a
6 Make Allowance to drive an outcome in the model results?

7 A. I do not.

8 MS. HANCOCK: Your Honor, I don't have any further
9 questions. With that, we would move for the admission of
10 Exhibits 421 and 422.

11 THE COURT: Is there any objection to the
12 admission into evidence of Exhibit 421, also NMPF-60?

13 There is none. Exhibit 421 is admitted into
14 evidence.

15 (Thereafter, Exhibit Number 421 was received
16 into evidence.)

17 THE COURT: Is there any objection to the
18 admission into evidence of Exhibit 422, also marked as
19 exhibit NMPF-60A?

20 There is none. Exhibit 422 is admitted into
21 evidence.

22 (Thereafter, Exhibit Number 422 was received
23 into evidence.)

24 MS. HANCOCK: Thank you for your time, Dr. Brown.

25 THE WITNESS: Thank you.

26 THE COURT: Mr. Rosenbaum.

27 MR. ROSENBAUM: Your Honor, at this point I would
28 like to move into evidence Hearing Exhibit 423, which is



1 IDFA-Exhibit 59, and Hearing Exhibit 424, which is
2 IDFA-Exhibit 60.

3 THE COURT: Is there any objection to the
4 admission into evidence of Exhibit 423, also IDFA-59?

5 MR. HILL: This is Brian Hill from the USDA. I
6 would prefer if this was admitted with their witness,
7 Mr. Brown. As it appears, 423 does include information
8 from the USDA, but there's also some manipulation of the
9 USDA's numbers, and so I think that deserves some
10 cross-examination.

11 THE COURT: Mr. Rosenbaum, your response?

12 MR. ROSENBAUM: Well, I think, Your Honor, your
13 consistent ruling has been that if people put in
14 government evidence and it can be replicated by others,
15 that you have admitted it on that ground.

16 I will repeat, as I said before, Mr. Mike Brown is
17 one of the people who prepared this document, and he will
18 be a witness and be able to explain it further, if anyone
19 wants him to do that, or I may ask him myself. But having
20 said that, I do think this qualifies for admission at this
21 time.

22 THE COURT: I disagree. When I looked at the
23 others, for example, those that MIG presented, and I
24 looked at the legend, I felt that I could do those
25 calculations myself if I needed to, to determine whether
26 the added material was accurate.

27 I have no such confidence in this one. I really
28 will need your witness.



1 MR. ROSENBAUM: All right, Your Honor. We'll put
2 it in through Mr. Mike Brown.

3 THE COURT: Thank you.

4 So I agree with you, Mr. Hill, and I will defer my
5 decision with regard to Exhibit 423 until we have further
6 evidence, which I expect to be soon.

7 And with regard to Exhibit 424, also IDFA-60, is
8 there any objection to the admission into evidence?

9 There is none. Exhibit 424, is admitted into
10 evidence.

11 (Thereafter, Exhibit Number 424 was received
12 into evidence.)

13 THE COURT: Now, is there anything further before
14 I allow Dr. Brown to step down?

15 There is not.

16 I thank you very much. I appreciate your being
17 here. I am honored that you gave us what you give
18 Congress.

19 Now, Mr. English.

20 MR. ENGLISH: Your Honor, as -- my name is Chip
21 English for the Milk Innovation Group.

22 As discussed this morning, the next witnesses we
23 would propose to be Mr. Joe Carson and Mr. Joe Shockey.

24 Mr. Carson is with United Dairy; Mr. Shockey is a
25 dairy farmer who ships to United Dairy. And we have done
26 in the past a couple of different panels, and I have a
27 number of documents, all were submitted last night, to
28 have marked.



1 THE COURT: So we'll go off record in just a
2 moment, but I want to make sure while we're on record that
3 our next exhibit will, in fact, be 425. Yes.

4 So with that as our starting point, Mr. English,
5 we'll go off record while these are marked and
6 distributed.

7 We go offer record at 1:56.

8 (An off-the-record discussion took place.)

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

10 We're back on record at 2:05.

11 Mr. English, I have marked exhibits in front of
12 me. Do you want me to tell you what I have?

13 MR. ENGLISH: Or maybe I can tell you what I think
14 you have?

15 THE COURT: That would be excellent.

16 MR. ENGLISH: You have United Dairy-001, which I
17 believe has been marked as Exhibit 425.

18 THE COURT: Correct.

19 MR. ENGLISH: Which is the testimony of Joe
20 Carson.

21 (Thereafter, Exhibit Number 425 was marked
22 for identification.)

23 MR. ENGLISH: You should have United Dairy-002,
24 which I believe has been marked as Exhibit 426, which has
25 a 2023 September map JPEG label. And it has -- so a
26 framework of parts of Pennsylvania, Ohio, Kentucky, West
27 Virginia, Virginia, and shaded areas of North Carolina,
28 South Carolina, with some stars and circles that --



1 THE COURT: Correct.

2 MR. ENGLISH: -- will explain it.

3 (Thereafter, Exhibit Number 426 was marked
4 for identification.)

5 MR. ENGLISH: You should have United Dairy-003,
6 which I was believe has been marked 427, which is another
7 map that says "map for me," and it has sort of portions of
8 Michigan, it has parts of the Great Lakes, over the
9 Atlantic Ocean, down through Tennessee and South Carolina,
10 and then a listing of some plants that the witness will
11 explain.

12 THE COURT: Plants that what?

13 MR. ENGLISH: That the witness will explain.

14 THE COURT: Ah, good. That's correct.

15 (Thereafter, Exhibit Number 427 was marked
16 for identification.)

17 MR. ENGLISH: You have United-004, which has been
18 marked as Exhibit 428, which is an Excel spreadsheet, not
19 created by MIG, labeled "Change Versus Current," with --
20 again, we'll have the witness explain, but basically
21 listing Michigan plants, Indiana plants, Ohio, Kentucky,
22 Pennsylvania, West Virginia, Maryland, Virginia, North
23 Carolina, and South Carolina.

24 THE COURT: Correct.

25 (Thereafter, Exhibit Number 428 was marked
26 for identification.)

27 MR. ENGLISH: You have -- that's the last United
28 Dairy.



1 You then have Shockey, S-H-O-C-K-E-Y, 001, which
2 is the testimony of Mr. Joseph Shockey, DVM, Exhibit 429.

3 (Thereafter, Exhibit Number 429 was marked
4 for identification.)

5 THE COURT: I did not realize that Dr. Shockey is
6 appearing. Wonderful and correct.

7 MR. ENGLISH: And then finally, you should have
8 Shockey-002, which is exhibit -- should have been marked
9 as Exhibit 430, which is his own map, similar but
10 different from the map -- from one of the maps from
11 Mr. Carson, showing portions of what I would call the
12 Midatlantic and the Eastern Midwest, again, up to the
13 Great Lakes and down to the Atlantic Ocean, down to
14 Georgia. And that has been marked as Exhibit 430, I
15 believe.

16 THE COURT: Correct. Good.

17 (Thereafter, Exhibit Number 430 was marked
18 for identification.)

19 MR. ENGLISH: Now, what I propose doing, Your
20 Honor, to have just a couple limited questions with each,
21 then have them each give their statements, and then I will
22 have some follow-up direct, and then they will be subject
23 to cross-examination, if that's acceptable.

24 THE COURT: That's fine. Now, both gentlemen are
25 seated here on the witness stand. Which one will you have
26 testify first?

27 MR. ENGLISH: Mr. Carson will testify first.

28 THE COURT: All right. Before I swear them in,



1 which I will do each one individually, I would like them
2 to have a chance to position the microphone so that it is
3 most likely to be comfortable for Mr. Carson. Let's test
4 for just a moment, to see how that works.

5 If you were just looking at your document and
6 reading it, let's hear how your voice sounds.

7 THE WITNESS: Testing. Is that good? I have a
8 cold, so sorry if -- I'll try not to fall off too much as
9 I speak.

10 THE COURT: That's good. Very good. All right.

11 Then I'm going to swear each of you in. I'm going
12 to start with Mr. Carson, and I want you to state and
13 spell your name.

14 THE WITNESS: (Mr. Carson) Joe Carson, J-O-E,
15 C-A-R-S-O-N.

16 THE COURT: Have you previously testified in this
17 proceeding?

18 THE WITNESS: (Mr. Carson) No.

19 THE COURT: Dr. Shockey, I want you to state and
20 spell your name, please.

21 THE WITNESS: (Dr. Shockey) Joe Shockey,
22 S-H-O-C-K-E-Y.

23 THE COURT: And following your name, looking at
24 Exhibit 429, are the letters DVM.

25 What does that stand for?

26 THE WITNESS: (Dr. Shockey) Doctor of Veterinary
27 Medicine from The Ohio State University.

28 THE COURT: Thank you.



1 All right. I'm going to swear you in now, both of
2 you together. Would each of you please raise your right
3 hand.

4 JOE CARSON,

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

7 JOE SHOCKEY, DVM,

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

10 THE COURT: Mr. English.

11 MR. ENGLISH: Thank you.

12 DIRECT EXAMINATION

13 BY MR. ENGLISH:

14 Q. So, Mr. Carson, first, we do not want your
15 personal address. Could you provide a business address
16 for the record, please.

17 A. (Mr. Carson) 300 North 5th Street, Martins Ferry,
18 Ohio, 43935.

19 Q. And, Mr. Shockey, rather than what you may have
20 put in your statement, do you have a business address
21 rather than a home address, or is that the business
22 address that is on your exhibit?

23 A. (Dr. Shockey) The business is beside the home.

24 Q. So 667 Crooked Run Road is the business address?

25 A. (Dr. Shockey) Yeah.

26 Q. And, Mr. Carson, United Dairy is a member of the
27 International Dairy Foods Association; is that correct?

28 A. (Mr. Carson) That's correct.



1 Q. You are not a member of the Milk Innovation Group;
2 is that correct?

3 A. (Mr. Carson) That's right.

4 Q. But given what you and I might call a long-term
5 history between the two of us, you requested that I handle
6 this testimony today, correct?

7 A. (Mr. Carson) That's correct.

8 Q. And you are appearing on behalf of United Dairy,
9 correct?

10 A. (Mr. Carson) That's correct.

11 THE COURT: A little more volume, please, for the
12 witness.

13 Mr. English.

14 MR. ENGLISH: Thank you.

15 BY MR. ENGLISH:

16 Q. Would you please proceed with your written
17 statement, Mr. Carson?

18 A. (Mr. Carson) Okay. Thank you.

19 My name is Joe Carson, president and owner of
20 United Dairy, Inc. As a quick background, I'm a 1986
21 Miami University graduate of business, whereupon I worked
22 for Proctor & Gamble for several years before joining my
23 father in the family business he started back in the late
24 '60s, early '70s. My brother James, a University of
25 Michigan graduate, joined the company in the early '90s,
26 and together we run the business along with our longtime
27 CFO, George Wood.

28 I'll just add, we are an independent family-owned



1 business.

2 We started with one small fluid milk processing
3 plant located in Martins Ferry, Ohio. We have been
4 fortunate to grow the business to three processing plants,
5 Charleston, West Virginia, and Uniontown, PA, as well as
6 Martins Ferry, Ohio -- and this would be indicated on
7 Exhibit 426, what you all have for 426.

8 THE COURT: So just so the transcript is accurate,
9 tell the transcript how to spell Martins Ferry, Ohio.

10 THE WITNESS: (Mr. Carson) M-A-R-T-I-N-S,
11 F-E-R-R-Y.

12 THE COURT: Thank you.

13 THE WITNESS: (Mr. Carson) We also have eight
14 branch depots throughout the five states, as indicated on
15 the -- by the blue dots on the map. The three plants are
16 regulated under Federal Order 33. The primary geographic
17 areas where our products are marketed are as follows:
18 West Virginia, Ohio, Western Pennsylvania, Eastern
19 Kentucky, Western Maryland, Western and Southwestern
20 Virginia, North Carolina, and South Carolina.

21 While we distribute a full line of milk, juices,
22 drinks, cultured products, UHT products, and ice cream, we
23 are strictly a Class I fluid milk processor, and
24 therefore, have a major stake in Proposal 19.

25 United Dairy processes approximately 62 million
26 pounds of milk per month. We service major national
27 grocery chains, independent supermarkets, convenience
28 stores, hospitals, institutions, restaurants, and schools.



1 These schools should be of concern, as many are in the
2 Appalachia area, where the population is decreasing every
3 year, and our trucks drive into very remote rural
4 mountainous areas that are difficult to access.

5 As you are aware, NMPF Proposals -- Proposal 19
6 calls for higher prices to Class I plants, and therefore,
7 to the consumers and the school children in these areas,
8 which should be a major concern to USDA, as well as the
9 constituents and their representatives in these states.

10 As a note, we participate in the monthly USDA bids
11 for food banks, and as a company, have made the decision
12 several years ago, I'll add, to invest heavily in the
13 automated corrugated packaging area with the intention of
14 packaging for USDA several years ago. To date, we have
15 supplied over 3 million units to the USDA Food Bank
16 program, mostly in our region of the country.

17 Our three plants are all located in Federal
18 Order 33 and have similar differentials which have been in
19 place for almost all of my career. Charleston, West
20 Virginia, is 2.20 differential; Martins Ferry is \$2
21 differential; and Uniontown is \$2.30.

22 THE COURT: And the 2.20, that's also a dollar
23 denomination; is that correct?

24 THE WITNESS: (Mr. Carson) Yes, that's right.

25 THE COURT: Now, you are turning to page 2 of
26 Exhibit 425, correct?

27 THE WITNESS: (Mr. Carson) Correct.

28 THE COURT: You may resume.



1 THE WITNESS: (Mr. Carson) Our milk supply comes
2 mostly from independent producers located on average
3 within a 175-mile radius from our plants. They vary in
4 size from smaller 50-cow farms to 500-plus-cow independent
5 farms. We supplement our raw milk needs with several
6 co-ops and work well with the local milk shed to help
7 balance the supply.

8 When milk is tight, as it tends to be in the fall,
9 the market will adjust through increases in Class I
10 over-order premiums. When there is an abundance of milk,
11 typically Class I premiums decrease. United has had no
12 problem getting milk as the over-order premium ensures
13 movement to the processing plants that need the milk.

14 I would like to point out that any change in the
15 current differential structure would be a major problem
16 for my company. We have lived with the current
17 differentials for many years, and our farmers know what to
18 expect from us. Also, our customers have programs and
19 pricing in place, including contracts, based on this
20 current cost structure.

21 United does not believe the current system should
22 change, but any deviation from what it is in place should
23 absolutely be equal to all Class I plants, whether it be
24 cooperative, proprietary, or private family-owned.
25 Failing to do so would lead to major disruptions in market
26 chaos at farm levels, to the marketplace, and ultimately
27 to the consumers.

28 I would like to stress the following points in



1 opposition to NMPF Proposal 19:

2 The current differentials have attracted plenty of
3 milk for our customers, and ultimately our schools and
4 local consumers. United services over 500,000 children in
5 over 1400 school buildings from Columbus, Ohio, School
6 District, south and east in Ohio, Eastern Kentucky to
7 Southwest Virginia and West Virginia. In times of need,
8 if farm milk is short, we pay to get the raw milk to our
9 plants in the form of higher over-order premiums. In my
10 35-year career, we have never shorted a customer for a
11 lack of milk because the premium system works.

12 Drastically adjusting differentials is not the
13 answer to attract milk to far away milk sheds, because the
14 market premiums will take care of that. When I read the
15 Federal Order system is broken or archaic, my first
16 thought is, they aren't taking into account how the market
17 over-order premiums work, as they certainly have worked
18 through the years for my company. They have evolved over
19 time, and they adjust when there's too much or too little
20 milk in certain milk sheds, enticing milk to where it
21 needs to go.

22 THE COURT: And I just want to make a small change
23 on our record copy to conform with what you have just told
24 us. We're in the paragraph number one that you just
25 completed reading, and on page 2, the fifth line down in
26 that paragraph, you inserted the word "milk."

27 So I'd like you to read the sentence beginning
28 with the end of the fourth line, read that sentence again,



1 "in times of need."

2 THE WITNESS: (Mr. Carson) In times of need, if
3 farm milk is short, we pay to get the raw to our plants in
4 the form of higher over-order premiums.

5 THE COURT: So when you read it the first time you
6 inserted after the word "raw," what word?

7 THE WITNESS: (Mr. Carson) "Milk."

8 THE COURT: And that's what I would like us to
9 insert on the record copy. All right.

10 And now, are you ready to move to your paragraph
11 that has a number 2?

12 THE WITNESS: (Mr. Carson) Yes.

13 THE COURT: You may.

14 THE WITNESS: (Mr. Carson) United has been
15 fortunate to survive in a segment of dairy that shrinks 2
16 to 4% each year for the last 20 years or so. So much has
17 changed. The family unit is smaller, people eat their
18 meals out, on the go, and don't sit down for dinner and
19 pour a glass of milk. Same with breakfast, as cereal
20 sales are down double digits the last five to seven years.
21 Alternative beverages such as almond and soy milk have
22 also severely cut sales of Class I fresh milk.

23 Basically, Class I sales are down and forecasted
24 to be down -- I'm sorry. Class I sales are down and
25 forecasted to continue to drop, so now NMPF wants to
26 increase costs another \$2 a hundredweight on average?
27 This makes no sense.

28 Higher prices for consumers for milk will just



1 slow down the sales even more. Milk is not 100%
2 inelastic, contrary to popular belief. Perhaps it is
3 between 2 and \$3 a gallon at retail, but not \$5 a gallon.

4 My experience is when milk reaches these heights,
5 the Class I fluid plants suffer, as does the consumer,
6 especially those that can't afford the current higher
7 price of everything: Gas, electricity, their mortgage
8 payments. Staples like milk should not be arbitrarily --
9 should not arbitrarily be raised to suit the needs of the
10 large co-ops who, in turn, would be the only beneficiary
11 of their proposed changes. This, of course, should not be
12 at the expense of the consumers, especially those residing
13 in the rural areas of Appalachia.

14 Number 3: United has competed with the co-ops,
15 and prior to the 2019, 2020 bankruptcy, the Dean Food
16 plants, for many years. Independent family-owned plants
17 have shrunk mightily in the last 35 -- in the 35 years
18 that I have been involved in managing United Dairy. While
19 we have been fortunate to survive and grow, thanks to our
20 customer base and our over 500 employees, 70% of which are
21 union, the proposal by NMPF would be the death now of our
22 company. I cannot stress this more.

23 Attachment 2 --

24 MR. ENGLISH: Is that now Exhibit 427?

25 THE COURT: Thank you.

26 So instead of Attachment 2, it's actually a
27 separate exhibit, Exhibit 427.

28 MR. ENGLISH: Is that correct, Mr. Carson? Do I



1 have the right one?

2 THE WITNESS: (Mr. Carson) Yes.

3 Attachment 2 shows the location of fluid milk
4 plants in our region, mostly Federal Order 33 pool plants,
5 but also several other fluid milk plants we compete with
6 in surrounding Federal Orders, Orders 1 and 5
7 specifically.

8 THE COURT: Now, Attachment 3, Mr. English, if you
9 will help us.

10 MR. ENGLISH: I believe that is Exhibit 428.

11 THE WITNESS: (Mr. Carson) Correct.

12 THE COURT: All right. So Attachment 3 is what
13 your statement reads, so you could just say "Attachment 3"
14 and then say "Exhibit 428."

15 THE WITNESS: (Mr. Carson) Okay.

16 Attachment 3, Exhibit 428, is a chart that shows
17 the disparity and inconsistency of Proposal 19 as it
18 relates to United Dairy's three processing plants. This
19 is shown on a per hundredweight and per gallon basis.

20 As you can see, United Dairy's costs increase
21 compared to every other competitor plant in our region.
22 In fact, as per the IDFA/MIG study on differentials,
23 United Dairy's three plants would receive the highest
24 increases in the country. This proposal is completely
25 unfair and blatantly gives an advantage to our
26 competitors.

27 The NMPF proposal raises our Charleston, West
28 Virginia, plant, which is the last HTST fluid milk plant



1 in West Virginia, by \$2.50 a hundredweight, an increase of
2 130%. Also, our two northern plants would increase by
3 110% and 120%, respectively. This is much higher than the
4 cooperative plants that we have competed with through the
5 years.

6 United's Martins Ferry, Ohio, plant has a proposed
7 differential increase of \$2.40, while most all other
8 plants in Ohio increase only by \$1.70. The DFA
9 Springfield plant would gain a \$0.06 per gallon advantage
10 over our plant, and we definitely compete with them in
11 Columbus, Ohio, and surrounding areas for business.

12 What happened to keeping plants that compete at
13 the same levels? Wasn't that the NMPF decision-making
14 process, per Dr. Erba's testimony? The same applies to
15 our Uniontown, Pennsylvania, plant that competes in the
16 Pittsburgh, Western PA markets.

17 The DFA Sharpsville, PA, plant gains \$0.20 per
18 hundredweight on our PA plant and \$0.50 a hundredweight on
19 our Martins Ferry, Ohio, plant on the border. This
20 proposal is simply an attempt to make United Dairy
21 uncompetitive with the co-op plants. There would be no
22 benefit to the farming communities around us or to the
23 farmers that ship to us in the long-run. Without our
24 plants, the cost to the farmers to ship their milk
25 elsewhere would increase, as they would have to drive more
26 miles to the next Class I plant.

27 And please understand, we would not be able to
28 pass on those higher increased these higher costs to our



1 customer base without the risk of losing them. Therefore,
2 we would need to try to absorb them, which would be
3 economically not possible, or risk passing along higher
4 market increases that co-op competitors aren't
5 experiencing.

6 In the end, adoption of NMPF's proposal would
7 seriously threaten the viability of our company.

8 To reiterate, there will be no benefit to the
9 farmers that currently ship to United Dairy, and without
10 our plants being financially sound and able to operate
11 profitably, I only see market turmoil for my independent
12 farmers who ship to us. One such supplier, Joe Shockey,
13 is a great farmer who has shipped to our plants for many
14 years. He is here today with me and will be sharing his
15 own thoughts on how Proposal 19 will impact his farm.

16 BY MR. ENGLISH:

17 Q. You want to read your summary first or you want
18 him to read his statement first?

19 A. (Mr. Carson) Whatever you want.

20 Q. Why don't you finish your statement first, just
21 for clarity in the record.

22 A. (Mr. Carson) NMPF Proposal 19 has no merit. It
23 is purely a market share grab that targets competitors'
24 Class I plants unfairly. The Mideast Order as more than
25 enough milk to support the dairy industry, and any
26 geographic shortages of raw are handled by over-order
27 premiums to the farmers. United has never had a problem
28 attracting milk for production, and when supplies are



1 tight, we pay more for the milk to attract the supply.

2 The last thing Class I milk needs is higher
3 prices. Higher prices would slow the consumption even
4 more than changing consumer trends and habits,
5 exacerbating the decline. This adds more pressure to the
6 long-term viability of the Class I plants, which will
7 eventually lead to less plants and less outlets for
8 farmers' milk.

9 Proposal 19 also puts an undue burden on United
10 Dairy's consumer base, which is demographically poorer,
11 declining population throughout Appalachia, with higher
12 retails for staple items like fluid milk.

13 Therefore, it is my recommendation that this
14 proposal be rejected outright and the current Federal
15 Order differentials be left as is.

16 Q. Thank you, Mr. Carson.

17 Mr. Shockey, will you now provide your statement?

18 THE COURT: And before we go there, Mr. English, I
19 would just like us to make the same change where the word
20 "raw" is, and if you want us to add "milk" --

21 THE WITNESS: (Mr. Carson) Sure.

22 THE COURT: -- we will. This is on page 4. It's
23 the second paragraph, second line, and we're going to
24 insert the word "milk" right after the word "raw."

25 So would you read that sentence again?

26 THE WITNESS: (Mr. Carson) The Mideast Order has
27 more than enough milk to support the dairy industry, and
28 any geographic shortages of raw milk will handled by



1 over-order premiums to the farmers.

2 THE COURT: Very good. All right.

3 Now, Mr. English, you may do what you were doing.

4 BY MR. ENGLISH:

5 Q. Thank you.

6 Dr. Shockey.

7 A. (Dr. Shockey) My name is Joe Shockey. I am
8 testifying today on behalf of our dairy family farm, and
9 hopefully the generations that follow us, so they have an
10 opportunity to be part of the dairy food supply chain in
11 this unique part of the United States without any
12 unnecessary burdensome or unintended consequences to
13 modify the Federal Milk Marketing Order pricing system,
14 specifically in regards to the county-by-county milk
15 pricing differentials. They say this is an unprecedented
16 opportunity. Let's not mess around. Let's get it right.

17 I am a veterinarian and a dairy producer who
18 graduated from Ohio State University. My brother and
19 father are also graduates of the College of Veterinary
20 Medicine. I met my wife at Ohio State, and she is the
21 dairy program manager for the State of West Virginia,
22 adhering to all the regulatory requirements of the
23 PMO/IMS. She is originally from Lane County, Ohio, which
24 is a leading milk shed nationally.

25 When my father was a younger man, there were dairy
26 cows all over the Mid-Ohio River Valley. That was a
27 different era and the men were cut from a different cloth,
28 having returned from World War II. These dairies began to



1 fade in the 1980s as there was a generational shift and
2 the decline has continued locally just like in other parts
3 of the U.S.

4 Many leaders in West Virginia were willing to let
5 dairy permanently fade away. We have less than 25 dairies
6 statewide, but have immediate opportunities where over a
7 billion pounds of milk will be necessary annually to
8 supply Mountaintop Beverage and the United Dairy network.

9 Why does United Dairy Charleston, \$2.50; United
10 Dairy Martins Ferry, \$2.40; and Mountaintop Beverage,
11 \$2.30, have the highest proposed differential increases of
12 any other processors in the expanded region?

13 Why does Kroger Newark pay less for milk than the
14 United Dairy in Martin Ferry, where they are the same
15 distance from the closest and leading milk shed near
16 Sugarcreek, Ohio, a \$0.40 per hundredweight proposed
17 difference, yet both about 65 miles away, and both share
18 in the I-70 corridor, both supply West Virginia
19 marketplaces. Who, then, has the advantages, and why was
20 this proposed?

21 DFA Sharpsville, Pennsylvania, is 100 miles from
22 Sugarcreek, while United Dairy, Martins Ferry, Ohio is
23 only 70 miles, yet Sharpsville has a \$0.50 per
24 hundredweight differential advantage in comparison. How
25 does this make sense to give the DFA cooperative
26 processing facility in Sharpsville, a milk lower
27 differential, when under the current order Sharpsville was
28 \$0.10 per hundredweight higher?



1 Another head scratcher is Reiter DFA
2 Springfield --

3 THE COURT: Now, would you spell Reiter for us?

4 THE WITNESS: (Dr. Shockey) R-E-I-T-E-R. And
5 this is in Ohio, Springfield, Ohio, which is 150 miles
6 from Sugarcreek, and would have a milk differential
7 advantage of \$1, at \$3.70, over United Dairy Charleston,
8 which is 170 miles away, that would have to pay \$4.70, and
9 then have to compete for contracts in West Virginia and
10 Southern Ohio given no other processors are in this region
11 to provide milk to these communities.

12 We are blessed in West Virginia to now have these
13 two trusted and respected dairy processing partners. The
14 state of West Virginia has been on a ten-plus year journey
15 to strengthen and rebuild the Appalachian dairy industry,
16 which includes all of West Virginia, parts of Ohio,
17 Pennsylvania, Maryland, Virginia, and beyond. It hasn't
18 been easy, but persistence pays off.

19 Look at the map, which is the Exhibit 002.

20 THE COURT: Now, let me just look. So this is
21 also Exhibit 426. Yes.

22 Pardon? Oh, this is the Shockey-002, yes, not the
23 United Dairy 002. Thank you.

24 So I'm now looking at Exhibit 430. Thank you all.

25 Would you start again that sentence.

26 THE WITNESS: (Dr. Shockey) Look at the map,
27 Shockey-002, and the nutritional gap that would be created
28 if we lost more processing capacity in or near West



1 Virginia.

2 USDA needs to consider the strong likelihood of a
3 nutritional gap that would be created if Proposal 19
4 results in the loss of local processing capacity in or
5 near West Virginia. Who would consistently step up to
6 deliver milk to our schools in the coal fields in the
7 middle of winter? How far would this milk have to travel
8 to reach various C-marts and dollar stores, which are the
9 primary retail sources of milk in many rural communities
10 of Appalachia?

11 Nutrient-dense food deserts are real in
12 Appalachia. An hour-plus drive to a grocery store with
13 fresh fruits and vegetables is not uncommon. I am deeply
14 concerned that Proposal 19, with the updated milk
15 differential prices, will, over time, place our processing
16 partners at an unfair disadvantage to the other dairy
17 processors in the expanded region. The differential map
18 should not create winners and losers by state or zip code,
19 but with modification allowances that are sensible to have
20 an equal opportunity in any given region that benefits
21 more dairy producers and thus the consumers, we hope to
22 continue to purchase nutritious and delicious dairy foods
23 like milk. Let's find ways to inspire the next generation
24 of milk drinkers. Let's increase Class I sales.

25 Who would have thought West Virginia would be a
26 hub of dairy invasion? I'm looking at this from the
27 inside out, while many of you are looking at this from the
28 outside in.



1 Please feel free to reach out to me. Please come
2 visit us in West Virginia and let's look at the bigger
3 picture of poverty, low-educational attainment, poor
4 caloric choice, nutrient-dense food insecurity, which is
5 not to be confused with readily available alcohol, tobacco
6 products, recreational drugs, sugary drinks, and
7 salt-laden foods, which leads to chronic disease and poor
8 health outcomes, beginning in the childhood years,
9 continuing into adulthood.

10 West Virginia is a state that is continuing to
11 lose population, so part of this journey has been to
12 promote the jobs and economic development of dairy food
13 processing and distribution activity to better feed
14 ourselves and others. This represents over a thousand
15 high-wage-scale jobs with great benefits. We hope this
16 triggers smart and strategic milk production across
17 Appalachia.

18 West Virginia is a centralized location on the
19 eastern seaboard that can provide competitive advantages
20 with shorter, straighter freight lines to not only high
21 population centers, but also to rural and isolated
22 communities. West Virginia is the third most forested
23 state in the nation, and can provide more paperboard
24 packaging and shipping pallets, clean, fresh water, and
25 even the energy to power facilities, while also being the
26 seed stock for milk packaging vessels like gallon jugs or
27 some of the more innovative packaging designs.

28 Think of how some of the larger metropolitan areas



1 in bordering states have more population than our entire
2 state and the cost associated with this comparatively. If
3 Proposal 19 is adopted as is, it will raise the price of
4 milk to consumers in Appalachia who can least afford it,
5 trigger logistical challenges of dairy food products,
6 encourage more people not to consume milk because of lack
7 of availability or their own-price sensitivity in
8 comparison to other beverages, and reduce the positive
9 trajectory we are trying to create for the entire dairy
10 community where milk creates jobs, all kinds of economic
11 activity, better health outcomes, with increased
12 educational attainment.

13 A unique part of West Virginia is its geography,
14 highway networks, and how the majority of our population
15 is in bordering counties of other states, think
16 Martinsburg, Morgantown, Wheeling, Parkersburg,
17 Huntington, Charleston, and Beckley.

18 MR. ENGLISH: Slow down.

19 (Court Reporter clarification.)

20 THE WITNESS: (Dr. Shockey) A unique part of West
21 Virginia is its geography, highway network, and how the
22 majority of our population is in bordering counties of
23 other states, think Martinsburg, Wheeling, Parkersburg,
24 Huntington, Charleston, and Beckley. West Virginia is
25 honestly like five different states, more closely
26 resembling the closest bordering state.

27 Maybe this was by design so some of the other
28 processors connected to the cooperative networks could



1 cherry-pick larger population areas in West Virginia near
2 interstates, while neglecting to serve areas along country
3 roads, a song that West Virginia fully embraces.

4 The term "Mountain Dew Mouth" is synonymous with
5 West Virginia, Appalachia, because milk is not always
6 available for our children and their dental preventative
7 care and health.

8 Please give consideration to broader impacts of
9 milk differentials, processor association, and market
10 accessibility. When I last checked, nearly 85% of the
11 milk in Federal Order 33, Mideast, was cooperative milk,
12 and the proposed milk differentials are squarely making
13 independent milk in the West Virginia, Appalachia, a
14 target that produced for independent processors that
15 provide finished product all across Appalachian.

16 If we lose our processing capacity, with full
17 confidence, we will have to discontinue dairying, as our
18 neighbors were first forced to join various milk marketing
19 agreements over the years, and the additional hauling and
20 cooperative costs put them out of business.

21 Milk typically doesn't flow north, so our milk
22 would be forced to travel nearly 300 miles south. Please
23 give greater consideration to the uniqueness of our state
24 and how we can work together for the entire dairy food
25 supply chain.

26 The \$0.50 milk differential as proposed would not
27 begin to cover the fuel cost alone on this distance,
28 taking our milk further south. As stated earlier, milk



1 does not typically flow north or west, and this would be
2 at a loss of revenue to our family business and future
3 dairy farm families considering relocation to West
4 Virginia and the immediate region to take advantage of the
5 ever-increasing processing capacity. If the producer
6 differentials are going to be modified, please modify them
7 in an equitable way based on this testimony today that
8 doesn't pick winners or losers.

9 Thank you.

10 BY MR. ENGLISH:

11 Q. Thank you, sir.

12 So my questions on additional direct are going to
13 be primarily for Mr. Carson, but Dr. Shockey, feel free,
14 if you wish to weigh in, I may add at the very end.

15 I want to focus a fair bit on both your testimony
16 about the locations of your plants relative to your
17 competitors.

18 I want to start with the plant in Charleston, West
19 Virginia, which you -- I believe you have tuned in to some
20 parts of the hearing, correct?

21 A. (Mr. Carson) Yes.

22 Q. You have not decidedly, you know, spent your
23 entire life in the last four months doing nothing else?

24 THE COURT: Your voice is dropping.

25 BY MR. ENGLISH:

26 Q. You have not spent the last five months
27 exclusively, you know, paying attention to every day,
28 correct?



1 A. (Mr. Carson) That's correct.

2 Q. But you are aware that Charleston, West Virginia,
3 has, for whatever reason, been labeled an anchor city by
4 National Milk Producers, correct?

5 A. (Mr. Carson) Yes.

6 Q. And the Class I differential that they have chosen
7 to propose to USDA for that operation is \$4.70, correct?

8 A. (Mr. Carson) Yes. That's correct.

9 Q. And that's the same as the model, correct?
10 Charleston is the same as --

11 A. (Mr. Carson) Yes, I think so.

12 Q. Yeah.

13 Are you aware that -- so Martins Ferry is in
14 Belmont County, Ohio, correct?

15 A. (Mr. Carson) Yes.

16 Q. Are you aware that the number that National Milk
17 chose to propose for that location in Ohio is \$0.30 higher
18 than the model?

19 A. (Mr. Carson) Yes.

20 Q. And are you aware that for your plant in
21 Pennsylvania, that's located in Fayette County, or
22 Fayette; is that right?

23 A. (Mr. Carson) Fayette.

24 Q. Fayette.

25 And that National Milk proposes, from the model,
26 to increase the differential for that by \$0.15 per
27 hundredweight over the model, correct?

28 A. (Mr. Carson) Correct.



1 Q. Now, you mentioned Sharpsburg [sic].

2 Are you aware that National Milk proposes lowering
3 the Class I differential from the model number by \$0.20 to
4 \$4, correct?

5 A. (Mr. Carson) Sharpsville?

6 Q. Yes. Sharpsburg -- or Sharpsville. Yes,
7 Sharpsville.

8 THE COURT: Which one?

9 MR. ENGLISH: Sorry. Give me one second.

10 THE COURT: Okay.

11 THE WITNESS: (Mr. Carson) Yeah, it was --

12 MR. ENGLISH: Sharpsville.

13 THE WITNESS: -- there was a \$0.20 deviation from
14 the model.

15 BY MR. ENGLISH:

16 Q. So -- but it was down, it was a down deviation,
17 correct?

18 A. (Mr. Carson) Right. Right. Decline.

19 Q. So that's a decline of \$0.20, and your plant in
20 Uniontown went up \$0.15, for a combined change of \$0.35
21 per hundredweight, correct?

22 A. (Mr. Carson) Versus the model.

23 Q. Versus the model.

24 And you also compete --

25 A. (Mr. Carson) Can I just interrupt?

26 Q. Yes, absolutely.

27 A. (Mr. Carson) I just want everybody to know
28 we're -- the first column, current differential, that's



1 our current differentials that are in place. That's not
2 anything to do with the model, just so there's no
3 confusion.

4 Q. And that's part of why I'm doing this, because
5 Exhibit 428, which you prepared, didn't put the model
6 numbers in, right?

7 A. (Mr. Carson) Right.

8 Q. So I'm clarifying by going through just a
9 couple -- I promise not very many examples, but I want to
10 go through a couple of examples, including some that you
11 yourself, you know, have brought up.

12 Are you aware that for Clark County, Ohio -- you
13 compete against a plant in Clark County, Ohio, correct?

14 A. (Mr. Carson) Right.

15 Q. That National Milk had proposed a \$4 level, and
16 then Dr. Vitaliano confirmed this week that is actually
17 \$3.70, correct?

18 A. (Mr. Carson) That's correct.

19 Q. Which is \$0.10 lower than the model, correct?

20 A. (Mr. Carson) Correct.

21 Q. Which for your Martins Ferry plant is a \$0.40
22 swing, correct?

23 A. (Mr. Carson) That's right.

24 Q. And you have indicated in your testimony, and
25 helpfully provided your charts that you compete, you -- I
26 don't want your precise number, but you do sell what you
27 would consider to be a significant amount of packaged milk
28 into the Order 5 marketing area, correct?



1 A. (Mr. Carson) That's correct. If you look on
2 Exhibit 426, you will see one of the branches there which
3 is one of our larger branches in Roanoke, Virginia, that's
4 in Order 5. We also have distribution into the North and
5 South Carolina states, which is Order 5. And we also sell
6 supermarkets into the Southwest Virginia market, which is
7 Order 5.

8 Q. And speaking about your distribution into North
9 Carolina and South Carolina, we heard earlier this week
10 and last week that National Milk has proposed 40 to \$0.60
11 decreases from the model for sales into those markets that
12 you have listed on Exhibit 428, correct?

13 A. (Mr. Carson) That's correct.

14 Q. So there you are in West Virginia, and the
15 proposal deviates from the model unhelpfully to your north
16 in Sharpsville, correct?

17 A. (Mr. Carson) That's right.

18 Q. Unhelpfully to your west in Springfield, Ohio,
19 correct?

20 A. (Mr. Carson) That's right.

21 Q. And unhelpfully southeast to North Carolina and
22 South Carolina, correct?

23 A. (Mr. Carson) That's correct.

24 Q. All against the model results, correct?

25 A. (Mr. Carson) That's right.

26 Q. You have also indicated on Exhibit 428, gallon
27 conversion, correct?

28 A. (Mr. Carson) That's correct.



1 Q. A conversion to gallons?

2 A. (Mr. Carson) The last three columns are the --
3 what the hundredweight conversion would be to gallons.

4 Q. And that's because, while you buy milk in raw form
5 in hundredweight, you sell it to your customers in
6 gallons, correct?

7 A. (Mr. Carson) That's correct.

8 Q. What does a \$0.06 per gallon difference between
9 your operation and your competitors to the north, west,
10 and southeast mean for your business?

11 A. (Mr. Carson) Well, \$0.06 a gallon means
12 everything. We have survived 35 years of this business,
13 and before I came, 20 years with my dad running the
14 business, and there were many, many years where we didn't
15 ever make \$0.06 a gallon. It is a low margin business --
16 high volume, low margin. We're -- if we make 1 or 2%,
17 we're happy. But we have to make a profit in order to
18 survive. We have to make a profit in order to put capital
19 back into the business. And these -- these hits we would
20 take versus our competitors would be absolutely
21 unsustainable for our company. We would -- we would risk
22 losing business, and we would not be able to survive. And
23 \$0.06 a gallon is just almost astronomical in our
24 business.

25 Q. So you indicated in your testimony you have over
26 500 employees?

27 A. (Mr. Carson) That's right.

28 Q. But you have fewer than 1,250, correct?



1 A. (Mr. Carson) That's right.

2 Q. So you would be a small business under the SBA
3 definition, correct?

4 A. (Mr. Carson) Correct.

5 Q. Dr. Shockey, is your farm a small business as
6 defined by the SBA?

7 A. (Dr. Shockey) Yes.

8 Q. Dr. Shockey, you have indicated that if your
9 customer, United Dairy, goes out of business, you will end
10 up having to ship your milk to the south, correct?

11 A. (Dr. Shockey) Correct.

12 Q. And you said that 300 miles is a pretty costly
13 endeavor, correct?

14 A. (Dr. Shockey) Yes.

15 Q. And as it happens, National Milk is proposing
16 lowering the Class I differentials in those locations
17 which will, you know, not exactly help pay for your haul,
18 correct?

19 A. (Dr. Shockey) Correct.

20 Q. Mr. Carson, you have indicated that you buy from
21 cooperatives, correct?

22 A. (Mr. Carson) Yes.

23 Q. And that you pay premiums on your milk purchased
24 from the cooperatives?

25 A. (Mr. Carson) Yes.

26 Q. Do you pay a fuel surcharge?

27 A. (Mr. Carson) Yes.

28 Q. There has been a fair amount of cooperative



1 testimony that they are unable to routinely charge
2 premiums.

3 Is that your experience?

4 A. (Mr. Carson) My experience is, and it's not been
5 forever, dealing with the DFA in our area, is we sit down
6 once a year and do a price for the year. That price is
7 basically in place for the year.

8 Q. Have you ever told them no?

9 A. (Mr. Carson) Well, yes, if we have other milk.

10 Q. Mr. Gallagher testified yesterday that processors
11 have levers to pull to pass along cost increases to
12 customers.

13 Is that your experience, routinely?

14 A. (Mr. Carson) No.

15 Q. He testified that you have other levers to pull to
16 adjust.

17 Do you know of any such levers that you can just
18 for cost increases?

19 A. (Mr. Carson) Listen, if you allow me. This is
20 the whole reason I'm here.

21 If my costs go up \$0.06 a gallon to a shared
22 customer, a large customer that I share with a cooperative
23 because of different regions, I cannot raise my price
24 \$0.06 a gallon unless all my competitors, including the
25 co-op, go up too. So it just puts me in a situation, I
26 either have to absorb \$0.06, which I don't have with that
27 customer, or I have to take the increase when my
28 competitors aren't getting that increase and risk losing



1 the business, which is what would happen.

2 So this is -- this is what happens in the
3 business. I have been doing this for a long time. Once
4 you lose a major customer, it puts increased pressure on
5 the plant. If you lose enough of them because you are not
6 competitive, your plant will have to close. And that's
7 not easy either. We have unions; we have contracts; we
8 have pensions; we have responsibilities to employees.

9 I have done, I betcha, 25 labor contracts in my
10 life. I have never once had a strike. And it's -- this
11 is so upsetting, and I can't even put it into words.

12 Q. There has been a fair bit of conversation, some of
13 it by economic experts, but you are someone who actually
14 sells milk in fluid form, in packaged form in the
15 marketplace, correct?

16 A. (Mr. Carson) Correct.

17 Q. When it comes to elasticity, what do you see when
18 you are out there in the marketplace?

19 A. (Mr. Carson) My definition of elasticity or
20 whether milk's inelastic is if it stays within a certain
21 range, say 2 to \$3 --

22 Q. A gallon?

23 A. (Mr. Carson) -- a gallon, if it goes up a dime or
24 goes down a dime, it probably is inelastic. But when it
25 goes up \$0.50, \$1, and hits certain price points, it
26 absolutely slows down.

27 And my only experience is, and I talk to buyers
28 about it, we do reviews with our customers, we'll sit down



1 and say, oh, milk was up this past year. Oh, what -- what
2 do you think that was, or why that was? Well, it's
3 because we put it at 2.99 for the, you know, six months,
4 and people recognized it as a value.

5 Or they will say, yeah, our milk sales are down or
6 flat, we didn't promote milk, or we didn't -- we kept
7 levels higher than we have in the past. To me, that means
8 it's -- it's not as inelastic as people think.

9 I'll give you another example. We do business in
10 Pennsylvania. Pennsylvania is no promotions. It's a --
11 you can't promote in Pennsylvania. It's tier-priced on
12 all the gallons. In the last 20 years when milk got up
13 high enough that whole milk went above \$4, myself and the
14 buyers that I deal with saw a drop in sales.

15 Now, last year we saw it get up, for the first
16 time ever, over \$5. Again, a drop in sales. And with the
17 one particular buyer I'm thinking of, said, yeah, we have
18 seen a drop in gallons, we have seen half gallons pick up,
19 but it hasn't made up for the -- for the overall unit
20 decrease -- or gallon decrease, I should say, volume
21 decrease.

22 So I don't -- you know, there's been a lot -- what
23 I have been listening to a lot of things about inelastic
24 and elastic, I don't claim to be an expert on it. All I
25 know is, if it gets up too high, milk sales will slow
26 down, especially on a big jump. You know, there's times
27 where milk will shoot way up, and if it breaks a \$3 mark,
28 a \$4 mark, a \$5 mark, it slows down or there's a trade



1 downward.

2 And in our area where we do business, there's a
3 lot of old people. And if you think people, these older
4 people are going to waste milk, they trade down, and they
5 say to themselves, oh, I don't want to pour any milk down
6 the drain. I don't want to waste it.

7 It's -- so maybe it's unique to our area, but this
8 is what I have seen in my career.

9 Q. Do you have an alternative solution to propose to
10 USDA for Class I differentials as opposed to what National
11 Milk has proposed?

12 A. (Mr. Carson) Well, I think the co-ops should
13 reverse everything. They should take the higher
14 differentials and give me the lower ones.

15 Q. Why is that?

16 A. (Mr. Carson) Well, I don't know. Actually, my --
17 here's my -- my recommendation is, as it is in my
18 testimony, I don't think we should do anything with
19 differentials. Because any variance is going to be a
20 problem, unless it's fairly instituted countrywide. If
21 you all decide that Class I should go up by whatever, then
22 just make sure every Class I plant gets the same amount.

23 Q. And at a minimum, if you are going to rely on the
24 model, you ought not to deviate from it in such a way that
25 you in West Virginia take it every way, you're squeezed to
26 the north, west, and southeast, correct?

27 A. (Mr. Carson) Yeah. I mean, it's all right on the
28 chart. I'll be glad to walk through it with anybody



1 afterward. I don't want to waste everybody's time but...

2 Q. Well, in terms of USDA, the only communication you
3 are going to have with USDA is on the record, so are there
4 any individual numbers that you and I didn't go over that
5 you want to go over? I was trying to use examples.

6 A. (Mr. Carson) Just real quickly, if you look at
7 Ohio, everybody's \$1.70 higher. Kroger is \$2, and we're
8 \$2.40. And we're closer -- in the DFA testimony they link
9 Sharpsville with Columbus, and actually Martins Ferry,
10 Ohio, is closer to Columbus. And yet ours was 4.40, and
11 Sharpsville is what.

12 Q. \$4.

13 A. (Mr. Carson) \$4. I mean, it's kind of like that
14 all across the board. And like I said, I -- I'm not going
15 to say, you know, it was on purpose, but it feels like it
16 was. And -- but if nothing else, at least I got to come
17 and state my case for my employees, for my farmers, for my
18 family. And I just think the whole thing -- the whole
19 proposal should just not be -- not be adopted.

20 Q. Thank you, Mr. Carson.

21 Dr. Shockey, do you have anything to add?

22 A. (Dr. Shockey) I'm trying to raise my family in
23 the state of West Virginia, and we milk cows. I want to
24 have that opportunity for my children to continue the
25 family farm.

26 Q. Thank you.

27 MR. ENGLISH: Your Honor, at this time this
28 concludes the direct examination of United Dairy Joe



1 Carson and Dr. Shockey, and I move admission of
2 Exhibits 425, 426, 427, 428, 429, and 430.

3 I thank you gentlemen for your time.

4 THE COURT: I could go through cross-examination
5 before I act on these exhibits, but I think I will go
6 ahead and see if there's any objection to their admission
7 at this point rather than waiting for cross.

8 So is there any objection to the admission into
9 evidence of Exhibit 425, which is marked United
10 Dairy-0001?

11 MR. HILL: Your Honor, I would -- obviously, I
12 don't have an objection, let me start by saying that. But
13 I want to make sure that we caught the changes that we had
14 on these. I'm not sure if they were done on the record
15 copy, the mentions of Attachment 1 on Mr. Carson's first
16 page. I'm not sure that they -- we now know that those
17 are Exhibits 426. And then the mentions of Attachment 2
18 and 3 on page 3, which we now know are 427 and 428.

19 And I think on Dr. Shockey's statement, on page 2
20 he mentions, on the sentence, the first full paragraph on
21 page 2, look at the map, and then I think he said 002, and
22 we now know that that is Exhibit 430.

23 So I wasn't sure if we wanted them inserted on the
24 record copies or not.

25 THE COURT: You know, it would be a good idea, and
26 I didn't do that. The only changes I made were just
27 insert "milk" in a couple of places, and I do think those
28 would be very beneficial to change on the record copy.



1 Why don't we take a -- let's see, it's 3:10.

2 Let's take 10 minutes. Come back at 3:20.

3 And then in the meantime, would you work with your
4 people to point out the ones you know of, and then we will
5 make sure on the record that we got them all.

6 I really appreciate your astuteness and care,
7 Mr. Hill. All right.

8 You may move around, and please be back and ready
9 to go at 3:20 p.m.

10 (Whereupon, a break was taken.)

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

12 We're back on record at 3:20.

13 Mr. Hill, do you want to read into the record the
14 changes that have been made on the record copy?

15 MR. HILL: Yes. On Exhibit 425, in the second
16 full paragraph, in the places where it says
17 "Attachment 1," which is the third line of the second
18 paragraph, and the fourth line in the second paragraph,
19 we're inserting "Exhibit 426."

20 And on page 3 of the same exhibit, Exhibit 425, in
21 the sixth line of the paragraph marked "3," where it says
22 "Attachment 2," we are inserting "Exhibit 427," and three
23 lines down from that where it says "Attachment 3," we are
24 inserting "Exhibit 428."

25 The final change is on Exhibit 429, on page 2, on
26 the first full paragraph where Dr. Shockey said "look at
27 the map," we are inserting after that, after the word
28 "map," "Exhibit 430."



1 That is the extent of the changes that we have.

2 THE COURT: Thank you very much. I think that's
3 very good to have gotten those captured on the exhibits
4 themselves.

5 Is there any objection to the admission into
6 evidence of Exhibit 425?

7 There is none. Exhibit 425 is admitted into
8 evidence.

9 (Thereafter, Exhibit Number 425 was received
10 into evidence.)

11 THE COURT: Is there any objection to the
12 admission into evidence of Exhibit 426?

13 There is none. Exhibit 426 is admitted into
14 evidence.

15 (Thereafter, Exhibit Number 426 was received
16 into evidence.)

17 THE COURT: Is there any objection to the
18 admission into evidence of Exhibit Number 427?

19 There is none. Exhibit 427 is admitted into
20 evidence.

21 (Thereafter, Exhibit Number 427 was received
22 into evidence.)

23 THE COURT: Is there any objection to the
24 admission into evidence of Exhibit Number 428?

25 There is none. Exhibit 428 is admitted into
26 evidence.

27 (Thereafter, Exhibit Number 428 was received
28 into evidence.)



1 THE COURT: And I mention that those exhibits are
2 also marked as United Dairy-1, United Dairy-2, United
3 Dairy-3, and United Dairy-4.

4 Is there any objection to the admission into
5 evidence of Exhibit 429, which is also Shockey-1?

6 There is none.

7 (Thereafter, Exhibit Number 429 was received
8 into evidence.)

9 THE COURT: Is there any objection to the
10 admission into evidence of 430, which is also Shockey-2,
11 002?

12 There is none. Exhibit 430 is admitted into
13 evidence.

14 (Thereafter, Exhibit Number 430 was received
15 into evidence.)

16 MR. HILL: Just to be clear, Your Honor, you did
17 admit Exhibit 429, correct?

18 THE COURT: Exhibit 429 is admitted into evidence.
19 Thank you.

20 All right. Now, Mr. English, these witnesses are
21 available for cross-examination?

22 MR. ENGLISH: Yes, Your Honor.

23 THE COURT: Thank you.

24 Who would like to go first?

25 CROSS-EXAMINATION

26 BY MS. HANCOCK:

27 Q. Nicole Hancock with National Milk.

28 Good afternoon to the both of you.



1 A. (Mr. Carson) Good afternoon.

2 Q. My first question, Mr. Carson, maybe I could start
3 with, do you believe that we should have a Federal Order
4 at all?

5 A. (Mr. Carson) Yes.

6 Q. What's the benefit that you see from the Federal
7 Order system that it provides to the dairy industry?

8 A. (Mr. Carson) Well, I think it -- well, it's
9 supposed to get an orderly marketing of milk and get milk
10 to all parts of the country, correct?

11 THE COURT: No, you asking her to affirm whether
12 that's correct is not the appropriate way to go. Your
13 sentence was excellent, but you don't need to ask her if
14 that's correct.

15 THE WITNESS: (Mr. Carson) Got you. Got you.

16 And I think it -- for the most part, it does that.
17 There's probably situations where there's too much milk in
18 some parts of the country and too many consumers in other
19 parts of the country. But through what has been
20 traditionally the market premium, over-order premium
21 system, you know, it's been able to handle that situation.

22 BY MS. HANCOCK:

23 Q. Okay. And you're able to get your supply of milk
24 today because of the Federal Order system; is that right?

25 A. (Mr. Carson) Yes.

26 Q. And I think you said that you pay an over-order
27 premium to your dairy farmers; is that right?

28 A. (Mr. Carson) Yes.



1 Q. And is that always or sometimes?

2 A. (Mr. Carson) Well, it's different for --
3 depending on who we're dealing with. So we deal with
4 three or four different co-ops and -- but we have mainly
5 independent retail- -- majority of our milk is independent
6 retailers. So, you know, it's all -- would be slightly
7 different, I guess.

8 Q. Do you have any independent dairy farmers who
9 exclusive supply to you?

10 A. (Mr. Carson) I'm sorry, I couldn't hear what you
11 said.

12 Q. Do you have any dairy farmers that -- independent
13 dairy farmers that exclusively supply to you?

14 A. (Mr. Carson) You mean by contract?

15 Q. By contract or by practice.

16 A. (Mr. Carson) Well, I don't know if "exclusively"
17 would be the right word. We have farmers that have
18 shipped to us through several generations, especially ones
19 that are close by, so -- but we don't have the, like,
20 exclusive contracts, like, where you can't ever go ship
21 somewhere else. We don't have that.

22 Q. And do you pay those independent dairy farmers an
23 over-order premium?

24 A. (Mr. Carson) Yes.

25 Q. And then your relationship with the co-op, you
26 tend to use them to backfill when you need additional
27 milk?

28 A. (Mr. Carson) Well, I don't know if I would say



1 "backfill." Historically speaking, we have bought from
2 the co-op in two different ways, and it's mainly Dairy
3 Farmers of America, although I go back into the '80s and
4 '90s when it was MMI and some other entities.

5 Number one, our Virginia base, everything we sell
6 into Virginia, which two of my plants ship into Virginia,
7 all the milk that comes to us is from the co-ops. And it
8 could be DFA, it could be Maryland, Virginia, it could
9 be -- there's, you know, a couple others.

10 Currently, we're buying more milk from Dairy
11 Farmers of America, especially in our Charleston facility
12 because we have grown, and we actually work pretty well
13 with them, so I -- I can also say there have been times
14 where we have not bought from Dairy Farmers of America or
15 bought from the co-op.

16 Q. You pay the co-ops over-order premiums as well?

17 A. (Mr. Carson) Yes.

18 Q. And fuel charges as well?

19 A. (Mr. Carson) Yes.

20 Q. Or I should say fuel surcharges as well?

21 A. (Mr. Carson) Yes.

22 Q. And the same for the independent dairy producers,
23 do you pay them the fuel surcharge as well?

24 A. (Mr. Carson) I don't -- I'm not going to get into
25 that.

26 Q. Are they responsible for covering their own fuel?

27 A. (Mr. Carson) Yeah. They do their own hauling.

28 Q. Okay. And I notice that on your website it says



1 that you pull in milk from within a 100-mile radius, but
2 in your testimony on page 2, you describe that it's
3 175-mile radius.

4 Is that just that as the milk --

5 A. (Mr. Carson) That's just my marketing director
6 not having the right number in there for the website.

7 Q. Okay. And then is it true, then, with the
8 consolidation of dairy producers, that you have had to go
9 further away to pull your milk in?

10 A. (Mr. Carson) Yes, I would say that's true.

11 THE COURT: Wait until her voice dies down and is
12 silent, because you don't know if she's finished yet.

13 THE WITNESS: (Mr. Carson) Okay.

14 THE COURT: Okay.

15 BY MS. HANCOCK:

16 Q. And you describe, at least on your website, that
17 you pull milk in from West Virginia, Ohio, Western
18 Pennsylvania, New Jersey, Virginia, North Carolina, and
19 Kentucky.

20 Is that all still the accurate territory that you
21 pull milk in from?

22 A. (Mr. Carson) I think that's a little outdated on
23 the New Jersey part.

24 Q. So you no longer pull milk in from New --

25 A. (Mr. Carson) No.

26 Q. -- Jersey?

27 A. (Mr. Carson) No.

28 THE COURT: Okay. She is talking, you are



1 answering, the court reporter doesn't know who to capture,
2 the question or the answer.

3 BY MS. HANCOCK:

4 Q. It's an awkward conversation.

5 So my last question was, you no longer pull milk
6 in from New Jersey?

7 A. (Mr. Carson) Correct.

8 Q. And where do you now get it from? What replaced
9 that supply that you used to have that came in from New
10 Jersey?

11 A. (Mr. Carson) I -- I'm not aware.

12 Q. Okay.

13 A. (Mr. Carson) I don't know.

14 Q. Fair to say, though, that you have had to go into
15 a broader territory to pull milk in?

16 A. (Mr. Carson) Yeah. But the only thing I would
17 say is that depends on whether our volume's up or down.

18 Q. If the price differentials are increased in your
19 area, would it result in a decrease in over-order premiums
20 that you would have to pay?

21 A. (Mr. Carson) Probably not.

22 Q. How do you know that?

23 A. (Mr. Carson) Well, because I have kind of thought
24 about it, and I don't think it would have any effect on
25 the over-order premium.

26 Q. Do you have -- I want to look at the map that you
27 have in Exhibit 426.

28 Do you have that in front of you?



1 A. (Mr. Carson) This one?

2 THE COURT: Yes.

3 BY MS. HANCOCK:

4 Q. Does Hood have a plant in Winchester?

5 A. (Mr. Carson) Hood?

6 Q. Yes.

7 A. (Mr. Carson) Winchester, Kentucky?

8 Q. Yes.

9 A. (Mr. Carson) I don't think.

10 Q. Or --

11 A. (Mr. Carson) I think it's Kroger.

12 Q. Oh, does Kroger have a plant there?

13 A. (Mr. Carson) Yes.

14 Q. And you didn't have that listed on your competing
15 plants?

16 A. (Mr. Carson) Oh. Yeah, we don't really compete.

17 Q. Do you know what they supply?

18 A. (Mr. Carson) Their own stores.

19 Q. What about in Winchester, Virginia, is there a
20 Hood plant there?

21 A. (Mr. Carson) I'm sorry?

22 Q. Is there a Hood plant in the Western Virginia?

23 A. (Mr. Carson) Hood? No.

24 Q. Or Winchester, Virginia, there's not --

25 A. (Mr. Carson) Winchester Farms?

26 Q. There's not a Hood plant in Winchester, Virginia?

27 A. (Mr. Carson) Oh, oh. Up north? I don't have it
28 marked on my sheet. But, no, we don't compete against



1 them.

2 Q. So there is a plant there, but you don't compete
3 against them?

4 A. (Mr. Carson) Yes. I'm not 100% sure, but I think
5 it's one of their big aseptic plants.

6 Q. Do you sell any aseptic products?

7 A. (Mr. Carson) No.

8 Q. Milk?

9 A. (Mr. Carson) No, we don't sell any or produce
10 any.

11 Q. What about Shamrock, does Shamrock have a plant in
12 Verona?

13 A. (Mr. Carson) I believe they do. Again, that's an
14 aseptic plant. I only listed fluid plants.

15 Q. You don't -- you don't compete for -- with either
16 one of those plants?

17 A. (Mr. Carson) Not really. Not when you think
18 about what we sell.

19 THE COURT: What was the spelling, Ms. Hancock, of
20 that last one you said?

21 MS. HANCOCK: Shamrock? Verona? V-E-R-O-N-A.

22 THE COURT: Thank you.

23 BY MS. HANCOCK:

24 Q. Dr. Shockey, I want to ask you a little bit about
25 your production.

26 Where -- tell me again where your farm is located?

27 A. (Dr. Shockey) We are located in the Mid-Ohio
28 River Valley. You might be familiar with Parkersburg,



1 West Virginia, which is just south of Marietta, Ohio, and
2 Charleston, West Virginia, which is our state capital. We
3 are equidistance along the I-77 corridor in the
4 Ravenswood/Ripley area between Charleston and Parkersburg.

5 Q. And how far is that that you have to -- that you
6 have to --

7 A. (Dr. Shockey) 40 miles. And we feel blessed that
8 we are less than ten miles from four exits of I-77.

9 There's a lot of jokes out there about West
10 Virginia. They are not all true. Some of them are. But
11 we don't live up some random hill or holler. We are right
12 beside the interstate, and our milk can go 40 miles to our
13 processing.

14 Q. And so you said 40, 4-0; is that right?

15 A. (Dr. Shockey) 40, 4-0.

16 Q. Okay.

17 A. (Dr. Shockey) That's pretty close in the grand
18 scheme of things.

19 Q. I would agree.

20 And does the -- do you get your hauling costs
21 covered for transportation of your milk?

22 A. (Dr. Shockey) We have to pay that as a producer.
23 We have contracts with the hauler.

24 Q. And do you know how much those costs have
25 increased over the last --

26 A. (Dr. Shockey) 20 years ago when I was in vet
27 school and we would sit in those farm transition meetings
28 as those larger dairy units were popping up around



1 Columbus, the veterinarian told us that's not something
2 that you share outside of a small circle.

3 Q. Okay.

4 A. (Dr. Shockey) Does that make sense?

5 Q. It does make sense.

6 Is it --

7 A. (Dr. Shockey) And -- and I would ask for a prayer
8 because our rates have recently increased. There was some
9 retirement of our hauler. And our hauler, just a few
10 weeks ago, was in a terrible accident. He was laying in a
11 ditch, face down. He would have drowned in the milk had
12 he not been rescued by good Samaritans. He's been in the
13 hospital in a coma, and he is recovering. But please keep
14 this man in your prayers.

15 Q. Very sorry for that.

16 It's fair to say that over the last 20 years, your
17 hauling costs have increased like all the other input
18 costs that go into running a business?

19 A. (Dr. Shockey) Yes.

20 Q. Is it fair to say that over the last 20 years, the
21 margins in operating a dairy farm have thinned out
22 considerably where there's a lot of pressure on the farms
23 in order to stay in business?

24 A. (Dr. Shockey) We have less farms all the time.
25 When my father was a young man, I believe our country had
26 over 600,000 dairy farms. When I was in high school,
27 100,000. I won a free pizza in vet school when I answered
28 74,291 dairy farms. I think I'd just read the Herdsman



1 the day before.

2 That number is below 30,000 right now. Take out
3 the Amish, the Apostolic, the Mennonite, there's very few
4 farms producing our nation's milk. If I'm not mistaken,
5 six states produce about 62% of the nation's milk.

6 When I was in vet school we always used to joke it
7 was the race to milk 9 million cows. Is that where we
8 want to go with this industry, one dairy milking 9 million
9 cows?

10 Q. And that's part of the pressure that you are
11 feeling when you are asking about preserving the legacy so
12 that you can pass on your dairy farm to your family; is
13 that right?

14 A. (Dr. Shockey) I don't want to force them, but if
15 they want to do it, I hope they have the opportunity.

16 Q. You, at least, want it to be available for them to
17 choose; is that fair?

18 A. (Dr. Shockey) Yeah.

19 Q. But in order to do that, it has to be profitable
20 to operate a dairy farm so they can have a way to provide
21 for their families?

22 A. (Dr. Shockey) Yeah. We have been fortunate that
23 we have remained in business when many can't.

24 Q. You talk about on page 3 of your testimony that if
25 the producer differentials are going to be modified, that
26 you would like them to be done in an equitable way.

27 I'm wondering if you could tell me what that would
28 mean for you to be done in an equitable way?



1 A. (Dr. Shockey) No, I'm not an economist, I'm
2 trained as a veterinarian. I have the dairy farm. No
3 disrespect to the economists that are here, but I feel
4 like if you took a box of crayons to some elementary
5 school kids and asked them to color the maps county by
6 county, they could have come up with something that was
7 more equitable.

8 From the testimony that was shared by Mr. Carson,
9 I mean, they tried to pick winners and losers, and they
10 are trying to make my state a loser. I feel like I'm
11 being attacked.

12 Q. And so you want to make sure that, as a dairy
13 farmer, that the places that you deliver your milk to are
14 treated fairly amongst all of the handlers; is that right?

15 A. (Dr. Shockey) Within a given region, yes.

16 So, again, our state's unique. The Eastern
17 Panhandle is closer to New York City than our state
18 capital of Charleston, West Virginia. It's a bedroom
19 community to Washington, D.C. It's very unlike the coal
20 fields. So pick some counties and go to the state that
21 borders them. It's more like that.

22 So when I say "equitable," make it make sense for
23 the region, the part of the state that has processing
24 partners so there's competition. Competition is good.

25 Q. You have in your testimony on page 3 that a \$0.50
26 milk differential as proposed would not begin to cover the
27 fuel costs alone on the distance for you to deliver your
28 milk.



1 Do you recall that testimony?

2 A. (Dr. Shockey) Yes. And that was in reference --
3 as I was reading those, I could've written that a little
4 bit better. That would be if our milk had to go
5 approximately 300 miles south to that Greensboro, North
6 Carolina, High Point, North Carolina, area. And that's
7 not accounting for the tolls we'd have to pay on the West
8 Virginia Turnpike. It's an 88-mile stretch of road from
9 Charleston to the state line in Virginia. All these costs
10 add up.

11 Q. Are you able to share what it would take to cover
12 your hauling cost for the 40 miles that it -- that it
13 takes now for you to deliver your milk?

14 A. (Dr. Shockey) Could you repeat the question?

15 Q. Yeah. I'm just putting it in the context of this
16 \$0.50 milk differential that you are talking about here
17 that you said wouldn't be enough to cover your fuel costs.

18 Can you tell us, for the amount of miles that you
19 have to cover to deliver your milk today, what it would
20 take to cover all your hauling costs?

21 A. (Dr. Shockey) It only makes sense that the closer
22 you are to the processor, the less costs you have.

23 Q. Do you -- have you quantified that though?

24 A. (Dr. Shockey) I don't have a number for you
25 today.

26 Q. Okay. And have you done any analysis as to what
27 it takes for the milk hauling costs in any of the regions
28 where you supply milk?



1 A. (Dr. Shockey) Not in the broader picture of this.

2 MS. HANCOCK: Okay. I thank you both for your

3 time.

4 THE WITNESS: (Dr. Shockey) Thank you.

5 THE COURT: Other cross-examination before I

6 invite questions from the Agricultural Marketing Service?

7 I see none. I invite the Agricultural Marketing

8 Service to ask questions.

9 CROSS-EXAMINATION

10 BY MS. TAYLOR:

11 Q. Good afternoon.

12 A. (Mr. Carson) Good afternoon.

13 Q. Thank you both for joining us today to put some

14 testimony and evidence on the record.

15 I think I'll start with Dr. Shockey, if that's all

16 right.

17 I think you mentioned that your farm was between

18 Charleston, and I wrote it down somewhere, and

19 Harpersburg [sic].

20 Can you -- can you -- and so you're 40 miles from

21 the Charleston plant; is that correct?

22 A. (Dr. Shockey) Correct.

23 Q. Okay. And how many cows do you milk

24 approximately?

25 A. (Dr. Shockey) I have gotten so busy with economic

26 development and trying to raise a family of four and win

27 the state soccer championship, so it's hard to milk cows

28 when you are not there. But just a few months ago we were



1 shipping like 12,000 pounds a day.

2 Q. In your statement on the first page towards the
3 bottom, you mentioned Sugarcreek in relation to the DFA
4 Sharpsville plant and the United Dairy plant in Martins
5 Ferry, Ohio.

6 And so I just wanted to know why you -- I can't
7 say I know all of my geography, but I'm learning a lot in
8 this hearing -- so why -- why did you point out
9 Sugarcreek? Why is that important for us to know?

10 A. (Dr. Shockey) That is Tuscarawas County -- please
11 don't ask me to spell it because I have to look every time
12 I do it myself. But since I was a young boy, that was
13 always a respected dairy community. There's a road called
14 Ragersville Road. There's a lot of milk that goes through
15 there. And sometimes we find inspiration as we go along
16 in life. It's close to I-77 as well. It's north of
17 Cambridge, Ohio.

18 And there was a time I would invite West Virginia
19 state leaders, I said, "Let's go get an ice cream cone at
20 the Dairy Queen, and let's count the milk trucks that are
21 traveling our interstate system. Why does our food have
22 to travel so far? Why couldn't it just come to West
23 Virginia for this processing capacity to create jobs?"

24 But, again, just since I was a little boy, there's
25 a lot of milk from there, and that's a leading milk shed
26 for Northeast Ohio. It's a good reference point.

27 Q. Okay. That's very helpful.

28 That's in regards to milk supply and how -- what



1 it costs plants to procure a local milk supply, and that's
2 why you drew our attention to that?

3 A. (Dr. Shockey) Yes.

4 Q. Thank you. And I just like to summarize typically
5 when I hear testimony from farmers, and I do appreciate
6 you putting this on.

7 You made a number of unique points that we hadn't
8 heard yet about food deserts, as we call them at USDA, and
9 nutritional gaps, et cetera, so I do appreciate you adding
10 that point to the record.

11 And so what I gather generally your statement is
12 talking about, while there's 85 -- and this is on the last
13 page of your statement -- according to your statement
14 there's about 85% of the milk on Federal Order 33 that's
15 co-op milk, so there's only about 15% that would be
16 independent supply.

17 But that independent supply, in your opinion, it
18 sounds like it's pretty heavy in West Virginia, and it's
19 important to make sure that's considered in keeping those
20 farms and your independent processors competitive so that
21 you can keep that vibrant industry as you described?

22 A. (Dr. Shockey) Yes.

23 Q. Okay. Thank you.

24 Okay. I want to turn to Mr. Carson, if I may.

25 For your three plants, and I'm looking at the map
26 you provided, which is Exhibit 426, and I think these blue
27 dots are the eight branch depots that you referenced in
28 your statement; is that correct?



1 A. (Mr. Carson) Yes.

2 Q. Okay. Can you just explain for the record what a
3 branch depot is?

4 A. (Mr. Carson) A depot or distribution point would
5 be a location where milk is taken mostly in bulk from a
6 plant and then redis- -- put on to -- received at that
7 dock, and then redistributed on local routes in that
8 region.

9 Q. All in packaged form?

10 A. (Mr. Carson) In packaged form.

11 Q. Okay. And so when I look at that distribution,
12 that distribution network, and then I look at
13 Exhibit 430 -- and I want to be sure what I'm seeing on
14 430, because you had a little back and forth with
15 Ms. Hancock.

16 These aren't -- is it -- are these all the plants
17 in this area or just the plants that you believe you
18 compete with?

19 A. (Mr. Carson) No. It's -- it's just plants that
20 we felt affected, like, competitor plants. They have
21 plants in the Mideast Order. But we're also on the border
22 of 33, so we compete in area 1, for example, which is east
23 of Pennsylvania. We also compete in the south in Order 5.

24 Q. So --

25 A. (Mr. Carson) And also, Order 5 swings around into
26 Kentucky, and we have a branch depot real close there. So
27 we actually sell milk into Order 5 in the Kentucky area.

28 Q. Yeah. So if I'm looking at -- if I kind of look



1 at your branch depots and these maps, I see them in this
2 general Ohio, Pennsylvania, Kentucky, kind of that border
3 states on the west side, but on this I see plants all the
4 way up in Michigan.

5 So how far out do your depots go?

6 And I ask these questions, it's very important for
7 us to understand --

8 A. (Mr. Carson) Well, we sell -- okay. It's
9 probably not the best way, maybe I didn't explain it very
10 well. But we sell milk up into Cleveland, up into
11 Detroit. We sell milk in most of Ohio, not all of Ohio.
12 We sell milk east in Pennsylvania. We sell milk south. I
13 tried to say it without getting into so specifics in the
14 beginning of my testimony of kind of where we go.

15 So these plants around here would be somewhat --
16 I'm not sure saying competitors in all cases, but they
17 affect our markets. Okay? That would be the best way to
18 say it.

19 Q. Okay. So if I'll use as an example, you might not
20 compete directly with those plants in Michigan, but they
21 are competing with some of your other competitors, maybe
22 in the Ohio --

23 A. (Mr. Carson) Yeah --

24 THE COURT: Whoa. Whoa.

25 MS. TAYLOR: Sorry. Your Honor is doing a great
26 job keeping our record clean, which we all appreciate,
27 especially USDA, when we have to go back and read all of
28 this and figure out what the Secretary -- and recommend to



1 him what he should do. So that's why she's stopping us
2 like this, of which I'm very appreciative.

3 THE COURT: So --

4 MS. TAYLOR: So I'm going to finish my statement,
5 and then hopefully Mr. Carson will answer. Sound good?

6 THE COURT: Yes.

7 BY MS. TAYLOR:

8 Q. Okay. So I wanted just to give an example.

9 The plants in Michigan, you don't necessarily
10 compete directly for sales with them, but those plants
11 compete maybe with other plants in Ohio, which you do
12 compete with, if that makes sense?

13 A. (Mr. Carson) Yeah. That's one way of looking at
14 it, almost indirect.

15 Q. Uh-huh.

16 THE COURT: Now, this is a good time for you to
17 add anything else you would like to explain this
18 situation.

19 THE WITNESS: (Mr. Carson) I think -- I think my
20 testimony in my direct was pretty much covered the plants
21 that we're directly affected by.

22 BY MS. TAYLOR:

23 Q. Okay. And I'm going to get into that in a second.

24 So -- and one of the reasons -- I know this seems
25 kind of really detailed, but it's important for us to
26 understand those -- plant-to-plant equity on that -- on
27 this very micro level so we can go back and figure out
28 what -- what do we do with all this information. So you



1 are the best person to tell us about that.

2 A. (Mr. Carson) Okay.

3 Q. So I wanted to ask, if I'm looking back at
4 Exhibit 426, and you have your three plants and your eight
5 depots, could you talk about what plant services what
6 depot? So this is very specific -- it's very specific, if
7 you are willing.

8 A. (Mr. Carson) No problem.

9 Out of Martins Ferry: Zanesville, Lancaster,
10 Marietta, and Portsmouth.

11 Fairmont pulls from both Uniontown and Martins
12 Ferry.

13 And Charleston would have Zanesville, Beckley,
14 Roanoke, and actually a little bit of Portsmouth, but I
15 won't get into that.

16 Q. Okay. Thank you. Let's see.

17 And then if you could add for your fluid plants,
18 what plant -- what orders are they typically regulated on?

19 A. (Mr. Carson) All three of my plants are in
20 Federal Order 33.

21 Q. Do they have sales in other orders, even though
22 they are not regulated?

23 A. (Mr. Carson) Yes.

24 Q. And what's that reach?

25 A. (Mr. Carson) I would say it depends. But Federal
26 Order 5, we have a pretty decent amount of milk we sell
27 down there between the Carolinas and the Virginia and
28 Kentucky. It's not enough to check every month to see if



1 we go rise above the 50%, but I would say it's probably
2 more than 25%.

3 Q. Okay.

4 A. (Mr. Carson) And then Uniontown does sell milk
5 east into some Federal Order 1.

6 Q. Okay.

7 A. (Mr. Carson) Again, same thing would apply, it's
8 not enough to check all the time, but it's probably over
9 20%, something like that. I don't know specifically.

10 Q. Okay. Thank you. That's helpful.

11 You mentioned in some testimony, Virginia base.
12 And I know they have their own state order of some kind of
13 base with a program.

14 Can you just, for the record, kind of maybe
15 explain your understanding of how that program works, just
16 so we're clear about that?

17 A. (Mr. Carson) So if you sell -- if you want to
18 sell a customer in Virginia, you have to buy the
19 equivalent amount of raw milk from Virginia -- Virginia
20 co-ops basically.

21 Q. Okay.

22 A. (Mr. Carson) So if you sell 100 pounds, you will
23 get the equivalent back through their market, you know,
24 Virginia Commission. If you sell a million pounds, you --
25 it's up to the commission to give you the milk. And
26 it's -- I mean, as far as I know, it's only ever been
27 cooperative milk. And I don't mean specifically DFA, I
28 know they are one of them, but it's Maryland and Virginia,



1 and there's three or four different co-ops.

2 Q. So the milk you sell in Virginia doesn't have to
3 be Virginia milk necessarily, it's just, buy the
4 equivalent of that milk and --

5 A. (Mr. Carson) No, it's Virginia milk.

6 Q. Oh, it is?

7 A. (Mr. Carson) Yeah.

8 Q. Okay.

9 A. (Mr. Carson) I mean, there might be at a time
10 where if they can't get it to you, maybe they get it
11 through some other means. But I would say that's probably
12 not the -- that would be more the exception.

13 Q. Cleared up my understanding of that program.

14 A. (Mr. Carson) Yeah.

15 Q. Thank you.

16 And is it -- would it be correct that that
17 Virginia milk goes through your Charleston plant, since
18 it's the closest plant?

19 A. (Mr. Carson) Most of it. But we also have some
20 sales into Virginia from our Uniontown, into that northern
21 area.

22 Q. Okay. Okay. I'm turning to the second page, and
23 you have talked about how you have independent producers
24 and some co-ops.

25 Would you be -- can you talk about maybe the
26 breakdown of that, just percentage-wise? Do you have
27 75% independent milk?

28 And if I'm asking a question you don't want to



1 answer that's totally fine, just let me know.

2 A. (Mr. Carson) It's over 50% is independent.

3 Q. Okay.

4 A. (Mr. Carson) It's been as high -- in say the last
5 ten years, it's been as high as 75.

6 Q. Okay.

7 A. (Mr. Carson) I mean, so just depends.

8 Q. Okay. So that varies?

9 A. (Mr. Carson) I'm sorry.

10 Q. It varies annually or monthly?

11 A. (Mr. Carson) I could not hear you.

12 Q. It varies? Your percentages vary?

13 A. (Mr. Carson) Yeah, it varies on a lot of things,
14 because we don't have a staggering amount of sales. So if
15 you get a customer and you need milk, you bring milk in.
16 Sometimes, you know, it's going to vary, or if you lose a
17 customer it could vary, so...

18 Q. And you talked about your premiums. Sounded to me
19 like they were kind of seasonal premiums.

20 Would that be correct?

21 A. (Mr. Carson) I think the easiest way for me to
22 explain it without getting too into our personal
23 relationships, is -- is in our -- in -- for my company, we
24 need to have a partner for the summer, because we do a lot
25 of school business. So that's taken into account when we
26 do -- you know, when we work with co-ops.

27 Q. Okay. And you talked about your -- and I'm
28 looking at the second full paragraph on page 2. Your



1 customers have programs and pricing based on the current
2 cost structure.

3 And I -- I'm not asking for any confidential
4 information, but -- well, the question I do have is,
5 are -- Federal Order prices are monthly.

6 A. (Mr. Carson) Right.

7 Q. So is that accounted for in how you price to your
8 customers?

9 A. (Mr. Carson) Yes, I would say mostly now.

10 Q. Okay. So I wanted to talk a bit about Charleston,
11 which I do appreciate, as Mr. English will tell you, all
12 the maps everyone has put onto the record to help us
13 orient ourselves.

14 For your Charleston plant, and you are talking
15 about the plants that you compete with, and how the
16 proposed differentials under the -- 19, your differential
17 increases and everybody else's in relationship to where
18 you currently stand is less.

19 What we have heard on the record about why that
20 was offered in Proposal 19, and we went back to look to
21 see, okay, what was the reason, was that generally costs
22 are more to supply that area because it's mountainous was
23 one of the reasons, and it's harder to supply the west
24 side of the state, which it looks like, I would consider
25 Charleston in the east side of the state.

26 A. (Mr. Carson) It's kind of in the central.

27 Q. Okay.

28 A. (Mr. Carson) But I know what you mean.



1 Q. But -- so that --that's the reason that, you know,
2 if I could sum up on the record as to why the Charleston
3 differential was justified, it came out of the model. It
4 wasn't adjusted down because it's harder to supply that
5 area.

6 I just want to get your take on how you think the
7 difficulty is to supply that plant, in -- in response to
8 that?

9 A. (Mr. Carson) Well, for example, in Charleston, if
10 I ship milk, which I do, down into the Charlotte market,
11 which is the growing market, it's all interstate the whole
12 way down. And the terrain down through there, it's not
13 like -- completely that much different than in our
14 Charleston market. So we -- we have a differential of
15 \$2.50 added on, whereas if I wanted to go to ship milk
16 down into Charlotte, down into that Winston-Salem area or
17 the High Point area, I think their -- theirs went up
18 \$1.80.

19 Now, if it was \$0.10, \$2.40 or something, I
20 probably wouldn't -- you know, it would make more sense to
21 me. But that's -- you know, that's like, \$2.50, 1.80 --
22 \$0.70. I mean, these are major, major differences --

23 Q. For that milk --

24 A. (Mr. Carson) -- from where we sit now to where
25 this proposal is. It's a massive amount of disparity.

26 Q. So for that milk that you ship, packaged milk that
27 you're shipping in Federal Order 5; is that correct?

28 So those Federal Order 5 plants, under the current



1 system, pay a -- on top of the differential, pay an
2 assessment for transportation assistance to bring milk --
3 raw milk into the area.

4 Does your plant have to pay that assessment for
5 any milk that you ship down into Order 5?

6 A. (Mr. Carson) We -- you mean like a transportation
7 credit?

8 Q. Yes.

9 A. (Mr. Carson) No, we don't have any.

10 Q. Okay. You talk about how, in your opinion, the
11 differential increases -- and we'll leave aside -- I want
12 to leave aside for the moment to the impact to your plant
13 itself -- but you talk about how you do not think it will
14 help producers in your area.

15 So I wondered if you could expand on why you think
16 that is the case?

17 A. (Mr. Carson) Well, what I'm saying mostly is --
18 is -- I mean, if we're left uncompetitive, roughly \$0.06 a
19 gallon, we wouldn't disappear immediately, but we would
20 most likely lose business or become very unprofitable if
21 we tried to absorb some of this. And over time, we would
22 really struggle, and that just would not benefit any
23 farmers, because our volumes would be decreasing. These
24 farmers would have to go find somewhere else to ship.

25 Now, you know, maybe there's a plant near, but
26 maybe they don't want to ship to that plant, or maybe they
27 have to go, and in Joe's case, 300 miles to a plant. You
28 know, my plants are different. We have different



1 competitors around.

2 And Charleston, you know, would be the toughest
3 scenario because there's not a lot of other plants around.

4 Q. Right.

5 A. (Mr. Carson) Pittsburgh has multiple plants.

6 Q. Okay. So I want to stay on that topic, and I want
7 to turn to Exhibit 428.

8 And so this is your chart. And on the top one I
9 just want to make sure it's clear for the record in your
10 labels of the rows, can you just define what MF, UT and
11 CHAS stand for, so everyone's clear?

12 A. (Mr. Carson) Can you say that again? I'm sorry.

13 Q. Sure. On the top of your chart in your labels for
14 the different columns, excuse me, the seventh column over
15 says "versus MF."

16 A. (Mr. Carson) Martins Ferry.

17 Q. Okay. I just want to make sure it's clear --

18 A. Okay.

19 Q. -- what those labels are.

20 A. (Mr. Carson) Okay. Got you. You're right.

21 Q. So could you say UT and then --

22 A. (Mr. Carson) Versus Martins Ferry, versus
23 Uniontown, versus Charleston.

24 Q. Okay. Thank you.

25 And I understand how you did the computations, but
26 what I really -- what we really want to know is, because
27 you are talking a lot about equity between competing
28 plants, is -- I know as a system your plant competes with



1 a lot of these plants, but if I'm looking individually at
2 your plant, kind of like, what areas do those plants --
3 what other plants, what areas do those compete in
4 directly, if that makes sense?

5 A. (Mr. Carson) Okay.

6 Q. Because as I look at it, I can't imagine --

7 A. (Mr. Carson) No, it's very -- I'm just going to
8 say it, it's going to be very hard to explain it all --

9 Q. Well, and --

10 A. (Mr. Carson) -- precisely.

11 Q. -- I don't want any proprietary. But, for
12 example -- and I have no idea if this is true -- but let's
13 say your United Dairy plant in Martins Ferry --

14 A. (Mr. Carson) Okay.

15 Q. -- does that compete with the Pittsburgh plants,
16 for example? So if we --

17 A. (Mr. Carson) Yes.

18 Q. -- wanted to --

19 A. (Mr. Carson) -- it does. It's one -- it's less
20 than an hour to Pittsburgh --

21 Q. Okay.

22 A. (Mr. Carson) -- from Martins Ferry.

23 Q. And does -- and so that's kind of what I'm looking
24 at.

25 A. (Mr. Carson) Yeah. Okay. All right. This is --
26 would be the best way to do it.

27 Q. Okay.

28 MR. ENGLISH: And you are starting to talk over



1 each other again, so for the benefit of the court
2 reporter. You're both doing great. But I just think -- I
3 was looking at the court reporter's face, so I think --

4 THE WITNESS: (Mr. Carson) What you can probably
5 do, would be the best thing, is if you went up towards
6 Cleveland and draw a line over towards the "N" in
7 Lancaster, around Cincinnati, Portsmouth, down to
8 Lexington, Kentucky, which is in the middle of the state.
9 We actually service part of Tennessee, the tip of
10 Tennessee.

11 And then you go, not the far East Coast and North
12 Carolina, but certainly to that Durham, Raleigh area,
13 Charlotte, and actually have some customers in South
14 Carolina.

15 Virginia, we don't go anywhere near the beaches.
16 We're not over towards Richmond, but we do go to
17 Lynchburg. We don't go to the far side of Maryland,
18 although we have a distributor in Baltimore.

19 When we go east from Uniontown, we do some
20 business on the way east, but we also have a good
21 distributor in New Jersey. And I think -- I'm not sure if
22 this will help, but the branches generally are not going
23 to go out super far.

24 BY MS. TAYLOR:

25 Q. Okay.

26 A. (Mr. Carson) They are more for schools. We do a
27 lot of -- all our branches do school business. Some do.
28 Like, Beckley does some supermarkets that I don't -- can't



1 do directly from a plant.

2 But in general, the theory has been in our
3 business, if you can serve larger quantities, those come
4 directly from the plants. And then if you have smaller
5 stops on routes, those can also be from your plants to
6 serve your local market, but also, the branches are
7 generally made up of smaller routes.

8 Q. Okay.

9 A. (Mr. Carson) Does that --

10 Q. That's very helpful.

11 So if we went back and wanted to see, okay, let's
12 look at the plant relationships between Martins Ferry and
13 its competitors, you, at least, gave us the areas which we
14 should be --

15 A. (Mr. Carson) Right. I mean --

16 Q. -- looking at?

17 A. (Mr. Carson) -- fresh milk, fluid milk, still
18 only doesn't travel much further than what DOT hours would
19 allow for. I mean, yes, there are exceptions with
20 overnights, but, you know, you have got a 150-mile,
21 200-mile one way, you got to get back, you got to deliver
22 the milk, and you got to get back. This is -- we're not
23 like aseptic. We're not like UHT. We're, you know, fresh
24 milk, shorter shelf life. So when we go somewhere, we
25 typically want to get back.

26 Q. So you are --

27 A. (Mr. Carson) Not 100% of the time like that, but
28 that's a general rule.



1 Q. And so a rule of thumb would be 100 to 200
2 miles?

3 A. (Mr. Carson) I'd say a couple hundred miles.
4 Let's -- four -- that's basically, you are going out in a
5 tractor-trailer four, five hours, and then you got to come
6 back. So you can only have 11 hours driving time. So,
7 you know, if you have a distributor, you go out, drop the
8 trailer, unhook, come back. You can do it. If you -- or
9 just one big, you know, area with a couple stops, you can
10 go out and come back.

11 MS. TAYLOR: Okay. That's it from AMS. I really
12 do appreciate your testimony and the detail you provided
13 us.

14 So thank you both to you and Dr. Shockey for
15 coming.

16 THE WITNESS: (Mr. Carson) Okay. Thank you.

17 THE COURT: Now, I want to note that the same fly
18 that bedeviled all the Ph.D. economists, chose these men
19 as well.

20 Who else has questions?

21 THE WITNESS: (Mr. Carson) As if it's not hard
22 enough to be up here, I have to fight a fly the whole
23 time.

24 THE COURT: Who else has questions?

25 Mr. English, any redirect?

26 MR. ENGLISH: Chip English for Milk Innovation
27 Group, and I'll try to keep this very quick.

28 //



1 REDIRECT EXAMINATION

2 BY MR. ENGLISH:

3 Q. I may have misunderstood what happened, but I was
4 paying attention, I thought, to the questions asked by
5 USDA and to your answers. And I thought she asked you a
6 question about getting raw milk to Charleston in terms of
7 what they went back and looked at in the record, and the
8 co-op said it was difficult to get raw milk into
9 Charleston. And while I think your answer was wonderful,
10 I think your answer was about packaged milk moving out of
11 Charleston.

12 So assuming I may be right as to what was being
13 asked, as I look at a map -- apparently I look at a lot of
14 maps -- Charleston is served by Interstate 64, which goes
15 east/west, correct? Is that correct?

16 A. (Mr. Carson) Yes.

17 Q. Interstate 77, correct?

18 A. (Mr. Carson) Yes.

19 Q. Interstate 79, correct?

20 A. (Mr. Carson) Yes.

21 Q. Do those interstates provide adequate access to
22 the Charleston plant?

23 A. (Mr. Carson) That's correct.

24 Q. Do you actually have difficulty getting milk
25 delivered to your plant?

26 A. (Mr. Carson) No.

27 Q. Have you ever had difficulty getting milk to your
28 plant, except on an unusual snowstorm day?



1 A. (Mr. Carson) No.

2 Q. Thank you.

3 MR. ENGLISH: I have no further questions.

4 THE COURT: All right. This will be our last
5 chance to ask questions. Does anyone have anything more?

6 All right. I see nothing.

7 Now, just so you understand the rules, and I'm
8 sure Mr. English has explained them to you, you are
9 allowed to say everything you know here in public in the
10 public hearing, then you are not allowed to contact the
11 Agricultural Marketing Service to add something that you
12 wish you had thought of.

13 So is there anything else that you think is
14 important that you would like to cover before we let you
15 step down?

16 THE WITNESS: (Mr. Carson) No. Thank you very
17 much.

18 THE COURT: Thank you.

19 THE WITNESS: (Mr. Carson) I appreciate
20 everyone's attention. It means a lot.

21 THE COURT: Let's see here. It is about 4:14.

22 Mr. English, what do you propose?

23 MR. ENGLISH: First I'd ask whether the court
24 reporter needs a five-minute break, or more, or none?

25 The next witness is Mr. Mike Sumners, who has a
26 relatively brief statement, dairy farmer, who has been one
27 of the ones willing, and we are grateful to him for being
28 willing, to wait. But given a dairy farmer, he is coming



1 ahead of Mr. Hau, H-A-U.

2 So I have handed to USDA -- I did mention earlier
3 this morning that we had substituted a statement by
4 Mr. Sumners that he made some changes this morning, and so
5 I'd ask that the Trihope Dairy-001 be marked as the next
6 exhibit.

7 THE COURT: All right. So the next exhibit number
8 is 431.

9 (Thereafter, Exhibit Number 431 was marked
10 for identification.)

11 THE COURT: Let's not write it on there until
12 we're sure, but I show 431.

13 Let's go off record while we're distributing and
14 marking.

15 (An off-the-record discussion took place.)

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

17 We're back on record at 4:20.

18 Mr. English.

19 MR. ENGLISH: So, Your Honor, similar, but for a
20 different reason to the last witness, Mr. Sumners, who is
21 a dairy farmer, is not a member of either of the Milk
22 Innovation Group or the International Dairy Foods
23 Association. He contacted us early during the proceedings
24 and asked whether I would provide him assistance.

25 And so I am calling Mr. Mike Sumners to the stand
26 of Trihope Dairy.

27 THE COURT: Thank you. And would you spell
28 Trihope for me?



1 MR. ENGLISH: T-R-I-H-O-P-E.

2 THE COURT: Thank you. I like the name,
3 Mr. Sumners.

4 Now, I'm going to swear you in before you talk.
5 Let's test it a little more. Just count down to five.

6 Would you state and spell your name?

7 THE WITNESS: Michael Sumners, S-U-M-N-E-R-S.

8 THE COURT: Yes, thank you. And you did that just
9 right, rather than talk to me, you have to talk to the
10 microphone. All right.

11 Have you previously testified in this proceeding?

12 THE WITNESS: No, ma'am.

13 THE COURT: Then I'm going to swear you in.

14 MICHAEL SUMNERS,

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

17 THE COURT: Thank you.

18 You may proceed.

19 MR. ENGLISH: Actually, Your Honor, if I may.

20 DIRECT EXAMINATION

21 BY MR. ENGLISH:

22 Q. Mr. Sumners, could you provide a business, not a
23 personal, a business address for the record? And if they
24 are the same, then instead, off the record, provide your
25 address.

26 Do you have a business address to provide other
27 than a personal address or are they the same?

28 A. They are the same.



1 MR. ENGLISH: And, Your Honor, I think in the
2 beginning of the proceeding you asked under no
3 circumstances for him to provide it off the record; is
4 that correct? That's what we used to do in this
5 proceeding.

6 THE COURT: I don't remember that, but I'm going
7 to be guided by what you think is best.

8 MR. ENGLISH: Sounds like we don't need to. All
9 right.

10 THE COURT: Okay.

11 BY MR. ENGLISH:

12 Q. All right. Then, in that event, ignore me on
13 that.

14 Mr. Sumners, please read your statement, which has
15 been marked as Exhibit 431.

16 A. My name is Mike Sumners. I'm a dairy farmer in
17 Henry County, Tennessee. Harris, the town in Henry
18 County, is 125 miles from Nashville, and 150 miles from
19 Memphis. I milk 800 cows on my dairy farm, Trihope Dairy.
20 I have been a dairy farmer since studying dairy at college
21 in 1981. I started in Williams County, Tennessee, working
22 for someone else, then became partners in the business for
23 about 20 years.

24 And in 2001, I moved to Paris and bought a farm.
25 And there, 20 years after trying to figure out how I was
26 going to do what everybody else was telling me I couldn't
27 do. I'm currently a member of a small cooperative, but I
28 have been a member of much larger co-op and an independent



1 through my career.

2 When in Franklin, which is Williams County, I
3 first shipped milk to Southern Milk Sales. In the early
4 '90s, I switched markets and sold milk as an independent
5 to a plant in Alabama for about four years until a co-op
6 out of Texas offered milk cheaper.

7 I was able to switch to a Kroger plant as
8 independent until 2001. In 2001, in Paris, I started
9 shipping milk to Old Deans, which became new Deans Foods,
10 then became Morning Star, and then Saputo.

11 As an independent, I was able to grow from 200
12 cows to 800 with the relationship I have had with the
13 plant. I became a member of DFA in 2016, and it was
14 downhill from there.

15 In 2023, with the new co-op and plant agreement, I
16 can see a future. My milk travels 27 miles to the Saputo
17 plant. It's a partially-regulated plant. My milk is not
18 pooled. However, Federal Orders are just as important to
19 me as everyone else in the dairy business. I am able to
20 get a better mailbox price under the new program.

21 I have attended approximately ten or more of these
22 hearings. I have testified before and appreciate the
23 opportunity to be here.

24 I'm concerned that Federal Orders have long since
25 gotten to the point where they end up creating winners and
26 losers, rather than dealing with the real issues. For
27 that reason, it has been very hard to listen to much of
28 this proceeding. Instead of letting markets and economics



1 work, everyone seems to have a plan for how to make the
2 system work for their benefit. I don't envy USDA who has
3 the job to do, but USDA should not be picking sides, and
4 instead, they need to do what is best for the industry.

5 How do you have a program since 1937 and few, if
6 anyone, understands what it is, what it does, or what it's
7 for? Everyone thinks it's for something different. It
8 doesn't make sense to me knowing that part of the Act is
9 to educate and supply information.

10 I learned from wonderful USDA personnel, one Tom
11 Franks in Atlanta, Arnold Stallings from Federal Order 5,
12 and others, who were mentors in me understanding this
13 process.

14 The first thing you should learn is FMMOs do not
15 determine the price of milk, which should be obvious.
16 Nowhere in the calculation is there farm costs. They're
17 in search of a spot unregulated milk price. Three or more
18 farms can form a co-op and do whatever. Most milk buyers
19 can choose not to be regulated. Milk is dumped and sold
20 at prices unrelated to pool obligation values.

21 I sell Grade A raw milk. I don't sell Class I,
22 Class II, Class III. A plant has to support a milk
23 supplier regardless of how the milk is used. With Federal
24 Orders, they have the same starting price because we pool
25 revenue among plants -- pool revenue among plants in a
26 geographical area.

27 In the Southeast, the raw milk supply has
28 decreased more than Class I sales have declined, and the



1 solution from the powers that be is spend more money
2 further from home, hauling milk long distances and
3 consolidating raw milk supply to a few least cost areas of
4 the country, which are subject to change. Maybe that's
5 the goal for some. That is where the program has headed
6 us.

7 A problem with the system is that raising Class I
8 price with pooling does not answer the need to get milk to
9 the fluid plant. Pooling with mandated large Federal
10 Orders make the problem worse. All dairy farmers have
11 costs, labor feed, energy, and hauling. We don't pool
12 costs, we only pool revenue.

13 Lower Class I differentials (or at least not
14 higher ones) doesn't mean that milk will not be cheaper --

15 THE COURT: Now, you read that different from what
16 you wrote. Start again with that sentence and read it the
17 way you want it.

18 THE WITNESS: Lower Class I differentials (or at
19 least not higher ones) doesn't mean that milk will be
20 cheaper, it still has to be paid for. But pooling dilutes
21 what goes to the dairy farmers shipping to the plant.

22 I just think we need to do things differently. If
23 you give the dairy farmer like me the ability through
24 transparency to see what is going on, we can negotiate a
25 fair price for milk.

26 Finally, my views on component pricing are that it
27 doesn't work as currently set up. The PPD is the pool
28 milk. The Class III is not pooled; the value is paid out



1 first.

2 After the hearing in early 2023 on transportation
3 credits, I filed a short comment with USDA. I said this,
4 I stand by it when it comes to the National Milk Producer
5 Federation proposal, NMPF proposal: "Doing nothing will
6 give you a much better outcome than the DCMA proposal.
7 Markets can work. How far milk travels is not a
8 performance standard that should be treated special.
9 Dairy farmer location should not be a restriction on milk
10 value. If you decide to make changes, please treat all
11 milk the same."

12 When I was learning about Federal Milk Orders, you
13 had to learn and understand performance standards. Today
14 we pool, and it is about who gets paid before we do the
15 pool.

16 BY MR. ENGLISH:

17 Q. Thank you, Mr. Sumners. I have just a couple
18 questions.

19 When you indicate that you milk 800 cows, and I'm
20 sure you have heard this question before because you have
21 testified before, are you a small business under the Small
22 Business Administration?

23 A. No. But that amount, who is paying for my milk,
24 it could. I have been small, but I'm not now.

25 Q. Which is an indication that you are getting a
26 better mailbox -- that's an indication you are getting a
27 better mailbox price, as you indicate in your testimony,
28 correct?



1 your co-op pays.

2 But presumably, if that plant pays a higher
3 Class I price, you would expect to receive additional
4 income; am I correct?

5 A. If the blend price went higher, I would get a
6 better price.

7 Q. So is your -- what you receive is tied to the
8 blend price in Order 7; is that right?

9 A. Yes.

10 Q. Okay.

11 A. But, of course, that plant doesn't have
12 necessarily a blend price, but there's a blend price
13 announced in Atlanta, and that's -- that's a focal point
14 of what I'm paid.

15 Q. Okay. I appreciate --

16 A. But if the blend price didn't raise in Atlanta,
17 even though you have the higher Class I differentials, my
18 price wouldn't change.

19 Q. And so -- so your -- your focus as a producer
20 would be on whether -- on the blend price impact and less
21 on the Class I price itself; is that correct?

22 A. Say that again.

23 Q. As a producer, you're more concerned with the
24 blend price than the Class I price?

25 A. Well, like I said, I sell raw -- Grade A raw milk.
26 What Saputo does packaging that milk, I really don't know.
27 But if the value in the market price goes up, I am
28 negotiating for a higher price. I mean, they have to



1 compete for milk. But when you regulate milk on top of
2 milk, it's hard to negotiate the price. You can do that
3 with the Class I differential. You can do that with
4 transportation credits.

5 I have long believed that higher Class I
6 differentials doesn't solve anything. A higher Class I
7 differential is not about creating a higher price. They
8 are going to have to pay a price for the milk or they
9 won't get the milk. A higher Class I differential is
10 about moving money away from the plant, not moving milk to
11 the plant.

12 Q. Explain that last sentence so it's clear for the
13 record what you mean by that.

14 A. Well, if you took it to extreme and, say, put a
15 \$10 Class I differential on a plant, you would attract all
16 kinds of milk. Unless that milk was limited some way with
17 the performance standard, it would dilute the pool, and
18 the price would actually be lower because you're going to
19 bring that higher price with historically lower prices.

20 So it does -- and the milk that comes, it may have
21 advantages in feed costs, labor costs, whatever. And it
22 more than moves the milk on top of you when you may have
23 high costs around these milk plants. And you lose your
24 local supply.

25 In the Southeast we have had a problem since I
26 started in the business. When I started in the dairy
27 business, you had a support price in California that the
28 California dairy farmers were buying beach houses. At the



1 same time, there were dairy farmers around me going out of
2 business.

3 And you could do the same thing with Federal
4 Orders. If you subsidize your manufacturing supply by
5 raising the Class I differentials, you are going to create
6 more commodities that will lower the price, and that price
7 comes all the way back to the fluid plant with the lower
8 price.

9 Q. Is that --

10 A. You have more milk. We have been doing it for 20
11 years. And doing the same thing, I think you're going to
12 get the same results.

13 Q. And is that because you think that -- or your
14 experience might be that a higher Class I differential
15 causes more milk to associate and pool on the order and
16 dilutes the blend price and moves money out to distant
17 producers?

18 A. Before Congress passed a law that said you have to
19 have X number of orders, you had a geographical area that
20 was defined, and the Class I differential supported a milk
21 supply.

22 Now, the Class I differential, they talk about
23 moving the milk in. You need to be high to move milk.
24 It's not supporting the milk supply. The milk supply's
25 far away. And that milk won't move unless you pay market
26 price there, plus hauling.

27 Now, as a farmer, I buy stuff that's far away. I
28 could do a small amount of it. But if that was my feed



1 supply was far away, I couldn't make money doing that.
2 And these milk plants, they are asked to support a milk
3 supply. You can't support a milk supply larger than your
4 needs.

5 The Class I, the Class III, IV price, are formula
6 prices. You take the commodity price, your
7 Make Allowances change over time, and all they are trying
8 to do is make up the difference in the Make Allowance.

9 I mean, we got Class III and IV overpriced right
10 now. Now, people don't like to hear that, but if you
11 can't make milk at that, the cheese price is going to go
12 up because you will have less milk, less milk, less
13 cheese. And with the Make Allowance so tight, all you get
14 is big plants. Now, if you lucky to live around one of
15 those plants, but if you had to haul your milk to those
16 plants, it's very costly. Or if you lose your plant,
17 that -- that's why you need to deal with true minimum
18 values and let markets work, or you're picking winners and
19 losers.

20 Q. You haven't said so directly in your statement,
21 but do you -- do you support or oppose increasing the
22 Class I price surface?

23 A. No.

24 Q. You oppose it? You -- your preference is that it
25 not be increased?

26 A. No. It was set too high in 2000.

27 Q. Okay.

28 A. In 2000, you had a choice of two Class I surfaces,



1 and I stayed up all night and read the decision when it
2 come out in 2000, and I was happy to see that
3 recommendation of a lower Class I pricing surface. But
4 like most people think, oh, higher Class I, more money.
5 Not necessarily.

6 Q. Do you --

7 A. You had high Class I differential in the Southeast
8 and you lost your milk supply.

9 Q. Do you have an opinion on any of the other
10 proposals in the hearing that I -- well, I know you do.

11 Do you want to put on record your position on any
12 other proposals that are under consideration?

13 A. I'm about given up.

14 Q. Thank you, Michael.

15 A. They are going to do what they are going to do.

16 Q. All right.

17 MR. MILTNER: I don't have any other questions.

18 Thank you.

19 THE COURT: Don't give up. If you have got an
20 opinion, we want to hear it.

21 THE WITNESS: Well, the importance of my opinion
22 is, is if you subsidize the milk supply anywhere in the
23 country, it's going to have a negative effect on you
24 trying to supply a fluid plant. And you talk about these
25 economic models. They did one when they did the
26 California hearing, and it showed it had an effect on the
27 whole country.

28 Now, we don't know how much of an effect it would



1 have, but economic models would point you in the right
2 direction to be looking. And the reason why it had an
3 effect was, what California was asking for, was higher
4 prices and mandatory pooling. They didn't get that.

5 But like back in the '80s when you had a support
6 price, that they were building milk plants to sell powder
7 and butter to the government, and cheese, it had an effect
8 on the whole country. I had to pay \$0.50 when I was a
9 young man to help get out of that mess. We had a
10 diversion program. We had a buy program.

11 In the late '80s they started having a market
12 again. The price of milk was the support price in the
13 '80s. And then the '90s came, and you could actually do
14 risk management because you had a market. There was no
15 need to do a risk management before that because the
16 market was what the government was buying.

17 But it seems like everybody wants to apply
18 economics to other people, but they don't see it when it's
19 applied to them.

20 But the Class I differentials, if you left them
21 alone, you have already took out people, and added
22 people, you change them again, you're picking winners and
23 losers. And -- and if you look, the losers are next to
24 the fluid plants, and you're supposed to be running a
25 fluid program.

26 Yesterday, listening to the hearing driving up
27 here, I thought I was coming to a hauling conference. The
28 milk -- the milk plant that I take to, there's some local



1 milk going in there. I think there's going to be some
2 more local milk come back in there. But most of the milk
3 travels further than what I drove yesterday.

4 And -- and the 20 years I have been there, there's
5 been quite a few loads of milk lost because they can do
6 other things besides beating their head against wall. And
7 it -- and it's not necessarily a lot of money. \$0.50
8 could mean either you're profitable or you're not.

9 And you can't haul milk very far for -- I think
10 it's a penny a mile now. That's 50 miles, and we're
11 hauling milk hundreds of miles. And the further you have
12 to haul it, the less they want to pay the local producers
13 through regulations, and you give the money to somebody
14 that's hauling milk. I don't know any farmer wins. The
15 truck driver wins.

16 I go to a milk bay most every night, and the long
17 haul drivers, they want to brag about how much money they
18 make. They make more money than the dairy farmer.

19 So anyway, I guess I'm done.

20 THE COURT: All right. Let's see who else has
21 questions before I ask for the Agricultural Marketing
22 Service's questions. So who else has questions before I
23 turn to the Agricultural Marketing Service?

24 No one. I invite the Agricultural Marketing
25 Service questions.

26 //

27 //

28 //



1 CROSS-EXAMINATION

2 BY MS. TAYLOR:

3 Q. Good afternoon.

4 A. Good afternoon.

5 Q. Thank you for joining us today.

6 You mentioned you're a member of a small
7 cooperative. What's -- can I ask the name of that co-op?

8 A. Pardon?

9 Q. What's the name of your cooperative that you are a
10 member of?

11 A. It's K-Y-T-N.

12 Q. And how many members does it have?

13 A. We have eight so far.

14 Q. Eight. Okay.

15 You say that, it sounds like you have a leadership
16 position in that co-op?

17 A. I have -- I'm sorry, I can't hear too good.

18 Q. Sure. I can speak up. I'm just not trying to
19 yell. I don't want you to think I'm yelling at you.20 Do you have -- the way you said that, I asked, do
21 you have a leadership position within that cooperative?

22 Like, a board member, or I'm not sure, I'm just --

23 A. I'm sorry, I'm hearing the echo with the mic.

24 Q. Okay. Let me try again on a different question.
25 You ship to Saputo.

26 A. Yes.

27 Q. And so is that where all of the co-op's milk goes
28 or just your milk?

1 A. Yes, all the milk is going to co-op. And there's
2 other co-ops bringing milk in there, too.

3 Q. Okay. And does your co-op supply any other plants
4 or just the Saputo plant?

5 A. Just Saputo.

6 Q. Okay. And then as a cooperative, you can reblend.
7 Do you all reblend or does the plant pay your
8 members directly?

9 A. We pay for services, testing, so forth. We know
10 what all these costs are, but there's nothing to reblend.

11 Q. Basically, they pay you all the same because you
12 ship to the same plant?

13 A. The plant pays X for the milk. The people that
14 administer the check writing, whatever, pays, and what's
15 left over pays to the producers. No matter what size they
16 are, everybody gets paid the same. Hauling rates are
17 based on what the producer can get the milk to the plant.
18 But everybody's paid the same.

19 Q. Okay.

20 A. And when you are -- when the blend price is
21 announced, I know what the price is that I'm going to
22 receive.

23 Q. Okay. On page 2, in talking about you now ship to
24 Saputo, you say you are able to get a better mailbox price
25 under this new program.

26 Does that mean under the new co-op arrangement to
27 Saputo? I want to make sure I understand what "new
28 program" means.



1 A. New program?

2 Q. Well, program to me as a government person means
3 some government program, so I'm sure that's not what you
4 mean.

5 So I'd like to know what you mean when you say --

6 A. My new program.

7 Q. Uh-huh.

8 A. It's the agreement that this little co-op has with
9 the processor. It's based -- it's more of a traditional
10 independent supply, but we function as a co-op.

11 We had -- we hadn't registered with the USDA as a
12 co-op because there's no need. The milk's not pooled.
13 But we are a co-op under Kentucky law.

14 Q. Okay. I understand. Yeah.

15 I don't want to be repetitive. I think Mr.
16 Miltner asked a couple of my questions, so let me see.

17 At the bottom of page 3, you write, "If you give
18 the dairy farmer like me the ability through transparency
19 to see what is going on, we can negotiate a fair price for
20 our milk."

21 And I'm wondering if I asked the question of,
22 like, what kinds of items would you like to see Federal
23 Orders provide to dairy farmers to help you negotiate that
24 fair price?

25 A. For me, I can -- with the information you have
26 now, I could probably figure it out. But there's other
27 producers that don't understand the Federal Order system.
28 There's a -- in the Southeast, we got a blend price. You



1 got T-credits. We're going to have inter-T-credits
2 probably. And all of it comes from milk revenue. But
3 it's earmarked to go do this. It's earmarked to go do
4 that, not necessarily -- and it's different for everybody.
5 They have a hard time figuring out what we do now. I
6 don't think they will ever figure it out.

7 Q. So with that, I think you are talking about more
8 education to producers so they understand the program and
9 then can go out and negotiate like you have been able to
10 do.

11 Would that be correct?

12 A. Well. In business, location is important. And
13 what we're doing is, the further you are from the plant,
14 you are treated differently.

15 And like I say, we don't know what the costs are
16 from place to place. These large dairies, they got to go
17 out to an area where they can buy enough land to put a
18 dairy, support a dairy, but then they got to haul the
19 milk. We have been doing that for years.

20 These small dairies that were traditionally around
21 the plants, they got higher costs. The high cost of the
22 plant that goes out to a suitable area to milk thousands
23 of cows, he got transportation costs. So the past several
24 years we -- we -- this large dairy over here, we say,
25 well, we need to haul this milk to the plant, but not the
26 small dairy, he don't get the benefit of that.

27 Now, these inter-transportation credits that they
28 are talking about that's going to pay a little bit, but



1 still, it's based on how far you are from the plant. So
2 as you lose your milk supply around the plant, you are
3 going to haul more milk. And they going to have to try to
4 raise the Class I differential, which is not a good way.

5 Milk supply would be there if it was paid. I been
6 around dairy farmers all my life, and -- and most of the
7 time it just gets too difficult. You got to send your
8 kids to school. They want a life. And if you can't
9 generate enough income to support all that, they go do
10 something else.

11 And in my part of the world, you can row crop.
12 Row crop is much easier than it is running a dairy
13 operation. So they leave row crop -- I mean, leave dairy
14 and go to row crop. So, you know.

15 But in my experience, and in most of my career I
16 have been paid I think a fair price. But everybody and --
17 but my co-op neighbors, they suffered and go'ed away
18 because the Federal Orders did some, but the co-ops did
19 more.

20 Lots of time they -- you know, deficit markets,
21 they wasn't even paid the Federal Order minimum price. So
22 the -- the co-op collects the money, they make the deal,
23 they haul the milk, and what's left over their members
24 got. And all the members are not treated the same.

25 So you got Federal Orders not treating the same.
26 You got co-ops not treating the same. You got winners and
27 losers.

28 When -- of course, when I learned about Federal



1 Orders, they would preach the all milk's treated the same.
2 That's not true anymore.

3 Q. Well, I do thank you for your time to come up here
4 today, Mr. Sumners, and your testimony on the record.

5 MS. TAYLOR: That's it from AMS.

6 THE COURT: Thank you. Are there any other
7 questions for Mr. Sumners?

8 I see none.

9 Have I admitted into evidence the exhibits?

10 Before you leave me, is there any objection to the
11 admission into evidence of Exhibit 431, which is Trihope
12 Dairy-0001?

13 MR. HILL: You have already admitted it, Your
14 Honor.

15 THE COURT: Oh, good. That's already admitted.
16 But just in case, I admit it into evidence.

17 Thank you so much. It's 5 o'clock. It's really
18 time for us to leave. Do you want to give me a preview of
19 what comes next?

20 MR. ENGLISH: I think we'll do a little tandem
21 here. We -- proving that I had assumed the role of the
22 mantle of the over-optimistic lawyer, Mr. Hau did not get
23 on today of Maple Hill Creamery. That's H-A-U. His
24 statement was distributed last evening. And he does have
25 an important business meeting at 11 o'clock, and since he
26 was left over from today, and since I don't believe I have
27 an objection from my colleague, Mr. Rosenbaum, we would
28 like to start with him tomorrow. He would be first.



1 THE COURT: And did you want to pass out any paper
2 copies of his testimony?

3 MR. ENGLISH: I would rather pass it out tomorrow
4 morning.

5 THE COURT: All right.

6 MR. ENGLISH: If people want it tonight, I can
7 give it tonight, but it has been posted.

8 MS. TAYLOR: I prefer paper. I'm old school.

9 THE COURT: Mr. Rosenbaum, while Mr. English is
10 distributing some paper copies, let's see, let's give it a
11 number.

12 Mr. English, it will be 432.

13 (Thereafter, Exhibit Number 432 was marked
14 for identification.)

15 THE COURT: And, Mr. --

16 MR. ENGLISH: 432, it's labeled Hau-001.

17 THE COURT: Hau-001. Good.

18 And, Mr. Rosenbaum, if you don't mind the
19 competition of the activity, I'll hear from you.

20 MR. ROSENBAUM: Yes. I think our next witness
21 then will be -- after Mr. Hau, will be Dr. Balagtas.

22 THE COURT: Spelled?

23 MR. ROSENBAUM: B-A-L-A-G-T-A-S, Balagtas.

24 THE COURT: B-A-L-A-G --

25 MR. ROSENBAUM: -- A-T-A-S. I'm sorry, I put one
26 too many A's in there. It's B-A-L-A-G-T-A-S.
27 Dr. Balagtas.

28 MR. ENGLISH: And then the next witness, Dr. Mark



1 Stephenson. He will be providing comments. He is coming
2 as a neutral observer on NMPF 19, providing comments. I
3 think he's been monitoring the hearing and received from
4 yours truly questions that have been asked by USDA and
5 others about the model. And that was -- was
6 electronically uploaded at 8:30 this morning.

7 I do not have paper copies with me, I apologize.
8 You will have them tomorrow, but it was uploaded at 8:30
9 this morning. And so Dr. Stephenson would follow
10 Dr. Balagtas as the third witness.

11 MR. ROSENBAUM: And then finally, if we have time
12 tomorrow, Mike Brown would be the fourth witness tomorrow.
13 And I do have paper copies of his testimony, which I'll
14 distribute now, if that makes sense.

15 THE COURT: I think that would be great.

16 MR. ROSENBAUM: Okay. He has a -- Mr. Brown has
17 both a written testimony and as well as a PowerPoint, and
18 I have them both in paper format. They were both posted
19 late yesterday. But I'll go ahead and hand out the paper
20 copies now.

21 I do not have Dr. Balagtas yet, but we'll post
22 that this evening.

23 THE COURT: All right. Then we'll skip over his,
24 and I'm going to assign Mike Brown --

25 MR. ROSENBAUM: Your Honor, Dr. Balagtas will have
26 both a written statement and a PowerPoint, so we need to
27 assign two -- leave two numbers blank for him.

28 THE COURT: I'm not going to leave numbers blank



1 if I don't have a document.

2 MR. ROSENBAUM: Okay.

3 THE COURT: So --

4 MR. ROSENBAUM: And we can number them out of
5 order.

6 THE COURT: So what you are going to distribute
7 now, though, we'll put a label on, we'll give one of Mike
8 Brown's documents 433 and the other one 434.

9 MR. ROSENBAUM: And, Your Honor, 433 which will be
10 the first number for him, that will be, as I handed out
11 right now, his written testimony, and that's
12 IDFA Exhibit 57.

13 THE COURT: 57. IDFA-57 is Exhibit 433.

14 (Thereafter, Exhibit Number 433 was marked
15 for identification.)

16 THE COURT: And Exhibit 434?

17 MR. ROSENBAUM: That will be IDFA Exhibit 58,
18 which is a PowerPoint.

19 THE COURT: IDFA-58, which is a PowerPoint.

20 (Thereafter, Exhibit Number 434 was marked
21 for identification.)

22 THE COURT: Let's go off record while those are
23 being distributed.

24 Off the record at 5:06.

25 (An off-the-record discussion took place.)

26 THE COURT: Let's go back on record at 5:07. I'll
27 wait until tomorrow for my copies, so as long as the
28 participants who will be looking at it tonight have



1 theirs, I'm happy.

2 I'm looking at Exhibit 433, IDFA Exhibit 57, and
3 Exhibit 434, IDFA Exhibit 58. Good.

4 If there's nothing else, I'm going to put us in
5 recess. Is there anything else?

6 I see nothing. I'll see you all at 8:00 in the
7 morning.

8 We go off record at 5:08.

9 (Whereupon, the proceeding concluded.)

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1 STATE OF CALIFORNIA)
) SS
 2 COUNTY OF FRESNO)

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4 I, MYRA A. PISH, Certified Shorthand Reporter, do
 5 hereby certify that the foregoing pages comprise a full,
 6 true and correct transcript of my shorthand notes, and a
 7 full, true and correct statement of the proceedings held
 8 at the time and place heretofore stated.

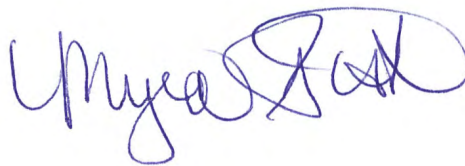
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10 DATED: January 21, 2024

11 FRESNO, CALIFORNIA

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