VOLUME VI

BEFORE THE SECRETARY OF

THE UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICES

In the Matter of Proposed Amendments to Tentative Marketing Agreements and Orders	)	Docket Numbers AO-14-A77, et al. DA-07-02

National Public Hearing

Monday, April 9, 2007

1:12 o'clock p.m.

Radisson Hotel Circle Centre

31 West Ohio Street

Indianapolis, IN 46204

BEFORE:

JUDGE VICTOR W. PALMER

U.S. ADMINISTRATIVE LAW JUDGE

UNITED STATES DEPARTMENT OF AGRICULTURE

Connor + Associates, Inc.
1650 One American Square
Indianapolis, IN 46282
(317)236-6022

A P P E A R A N C E S

On Behalf of the United States Department of Agriculture:

U.S. DEPARTMENT OF AGRICULTURE
OFFICE OF THE GENERAL COUNSEL
MARKETING DIVISION
BY: Garrett B. Stevens, Deputy Assistant General Counsel
Heather M. Pichelman, Attorney

and U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
DAIRY PROGRAMS
BY: Jack Rower, Marketing Specialist
Henry H. Schaefer, Marketing Specialist
1400 Independence Avenue, SW
Washington, D.C. 20250

A P P E A R A N C E S (Cont.)

On Behalf of Select Milk Producers, Lone Star Milk Producers, Zia Milk Producers, Continental Dairy Products and Dairy Producers of New Mexico:

YALE LAW OFFICE, LP

BY: Benjamin F. Yale, Attorney at Law

Ryan K. Miltner, Attorney at Law

527 N. Westminster Street

P.O. Box 100

Waynesfield, OH 45896-0100

On Behalf of Agri-Mark, Associated Milk Producers, Foremost Farms, USA Land O'Lakes, Northwest Dairy Association and Michigan Milk Producers:

BY: John H. Vetne, Attorney at Law

11 Red Sox Lane

Raymond, NH 03077

On Behalf of International Dairy Foods Association:

COVINGTON & BURLING, LLP

BY: Steven J. Rosenbaum, Attorney at Law

1201 Pennsylvania Avenue NW

Washington, D.C. 20004-2401

A P P E A R A N C E S (Cont.)

On Behalf of Dairy Farmers of America and Dairylea Cooperative:

LAW OFFICES OF MARVIN BESHORE

BY: Marvin Beshore, Attorney at Law

130 State Street

P.O. Box 946

Harrisburg, PA 17108

On Behalf of Maine Dairy Industry Association:

BY: Daniel Smith, Attorney at Law

64 Main Street

P.O. Box 801

Montpelier, VT 05601

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JUDGE PALMER: Let's go on the record. Let me give a little preamble. All right. This is the reopening or the continuation of a hearing that we started in Cleveland, Ohio.

I presume we're probably going to start the transcript with pages -- are you starting the number from that or are you going to start with 1?

THE REPORTER: Continuing.

JUDGE PALMER: Are you going to continue? Okay, good. So it'll be a continuation. What was the last number of the other one, anybody know?

MR. SCHAEFER: 1167.

JUDGE PALMER: There you go, you pass. 1167 was the last number. So this will start with 1168 I guess.

And I was handed a couple of documents. Do these need to be marked?

These are what?

MR. STEVENS: Yes, Your Honor. Garrett Stevens, Office of General Counsel, U.S. Department of Agriculture.

We prepared exhibits that we want to have entered in the record, starting with the Notice

of Hearing.

JUDGE PALMER: What was our last exhibit number, anybody know?

MR. STEVENS: I think 28. Was it 28?

JUDGE PALMER: Everybody agree to that? I've got a sheet. Let me make sure. I've got it. The last one I've got is 26.

MR. STEVENS: All right, 27, Your Honor.

(Thereupon, Exhibit No. 27 was marked for purposes of identification.)

JUDGE PALMER: So the proposed -- the notice is 27, and that's the Federal Register notice of Wednesday, March 21, 2007, it's Federal Register, Volume 72, page 13219, and it tells one and all that we're going to have this reconvened hearing here in Indianapolis, whereas the first part was in Strongsville, Ohio. I keep saying Cleveland. Strongsville's a suburb.

Then the next one would be 28, and that's the program announcement, is it?

MR. STEVENS: Press release, yeah.

JUDGE PALMER: What is that called?

MR. STEVENS: I believe it's a press release, Your Honor.

JUDGE PALMER: Press release will be 28.

MR. STEVENS: Yeah.

(Thereupon, Exhibit No. 28 was marked for purposes of identification.)

JUDGE PALMER: Then the next one is a Certificate of Mailing.

MR. STEVENS: Yeah, it's got a number of pages, Your Honor.

JUDGE PALMER: Okay. And we'll make that 29 in I don't know how many pages.

MR. STEVENS: We'll count them. Nine pages.

JUDGE PALMER: All right. And Certificates of Officials Notified, that's a different one?

MR. STEVENS: They're all together, Certificate of Mailing, it's all together. There are nine pages. The title page is to Dana Coale from David Walker, Certificate of Mailing, and then there are Certificate of Mailings from each of the market administrators. And then there's a Certificate of the Officials Notified from the hearing clerk. That's page 9. The first eight pages are the Certificate of Mailing from the market administrators.

JUDGE PALMER: Wait just a second. I had that number a moment ago and now I seem --

MR. STEVENS: 29.

JUDGE PALMER: I know, but I was going to add it on. Tell you what, let's start fresh with this. The first one was 27, 28, and then this one's 29. Okay. So we're through 29.

(Thereupon, Exhibit No. 29 was marked for purposes of identification.)

JUDGE PALMER: And then Appendix E is something different?

MR. STEVENS: Yeah. These are updated figures on the baseline and the econometric model, April 2007. The first one is --

JUDGE PALMER: It's titled Appendix E. Let's just call it Appendix E. How long does that go? That goes all the way through --

MR. STEVENS: Well, can we give it one number, Your Honor, No. 30?

JUDGE PALMER: Yes, 30 for Appendix E, which seems to be --

MR. STEVENS: It's a number of pages of text.

JUDGE PALMER: It ends on page --

MR. STEVENS: It has E numbering the pages. E-1 through 5 are the text, and then the tables, E-6 through E-31.

JUDGE PALMER: Okay.

(Thereupon, Exhibit No. 30 was marked for purposes of identification.)

MR. STEVENS: And then the next one we would like marked Exhibit 31. And that is, again, AMS Dairy Programs, National Econometric Model Documentation, For Model Calibrated to USDA Agricultural Baseline Projections to 2016, April of 2007, done by EAS, Office of the Chief Economist, Dairy Programs. That's 31. Is that 31? Yeah.

JUDGE PALMER: That goes -- is that the last one?

MR. STEVENS: It is. That has -- that is a 17-page document consisting of text and tables, so we would like that marked 31.

(Thereupon, Exhibit No. 31 was marked for purposes of identification.)

JUDGE PALMER: All right. Is there any objection to their receipt?

They're all received.

(Thereupon, Exhibit Nos. 27 through 31 were received into evidence.)

MR. STEVENS: Thank you, Your Honor. That's all we have.

JUDGE PALMER: Let's see. Let's take appearances just to make sure they're in the record. The court reporter will have a better feeling as to who's who when you get up, give your name, go to the microphone.

MR. STEVENS: Your Honor, I already put my name in the record. Garrett Stevens from the Office of General Counsel.

Heather Pichelman is here with me, who is also with the Office of General Counsel, U.S. Department of Agriculture, Washington, D.C.

MR. ROWER: Jack Rower, AMS Dairy Programs, Washington, D.C.

MR. SCHAEFER: Henry Schaefer, AMS Dairy Programs, Washington, D.C.

JUDGE PALMER: All right. Let's go to this side, just for the heck of it, starting with Mr. Beshore and your name.

MR. BESHORE: Marvin Beshore, B-E-S-H-O-R-E. I'm an attorney. My office is in Harrisburg, Pennsylvania. I'm representing Dairy Farmers of America and Dairylea Cooperative, Inc.

JUDGE PALMER: Anyone else at that table going to enter an appearance as such?

All right. Let's swing down to Mr. Yale.

MR. MILTNER: Thank you, Your Honor. Ryan Miltner with Yale Law Office in Waynesfield, Ohio, on behalf of Dairy Producers of New Mexico, Select Milk Producers, Continental Dairy Products, Zia Milk Producers and Lone Star Milk Producers.

And Benjamin F. Yale with our office is here as well as, and Christine.

JUDGE PALMER: Anyone else down there? Let's get Mr. Rosenbaum next.

MR. ROSENBAUM: Steven Rosenbaum representing the International Dairy Foods Association.

JUDGE PALMER: Anyone else at that table? Get back to Mr. Vetne.

MR. VETNE: Your Honor, John Vetne, V-E-T-N-E, continuing my appearance for Agri-Mark, et al., which are Agri-Mark, Land O'Lakes, Michigan Milk Producers, Foremost Farms, Associated Milk Producers and Northwest Dairy Association.

JUDGE PALMER: Anybody else have an appearance to enter? Yes, sorry.

MR. SMITH: Daniel Smith representing the

Maine Dairy Industry Association.

JUDGE PALMER: And then we have -- we received some motions last week that were mailed to me, I received them on Friday. And, Mr. Rosenbaum, you made the principal motion. I'll let you address it. You made the motion, I should say.

MR. ROSENBAUM: Thank you, Your Honor.

We filed a written motion on Friday, and I think the motion largely speaks for itself. I certainly won't waste Your Honor's time by repeating all of the arguments we advanced.

The motion covers two separate subjects. The first one relates to the proposed testimony by Attorney Ben Yale.

Your Honor, I have to say this is a new one for me. I've been practicing law for 27 years now, doing Federal Order work for 25 of those years, I think, something like that, and I've never been in a courtroom or an administrative proceeding in my life where an attorney who entered an appearance and was representing parties then purported to take the stand and testify, just never had that happen before, and I think that there's a good reason for that.

As the case law indicates, it really takes extraordinary circumstances for an attorney who's appearing as an attorney in a proceeding to then take the witness stand. And Mr. Yale is a fine advocate for his clients' interests. He's got perhaps as many years of experience as I do, if not that, close, but he's a lawyer in private practice just like me. He's an advocate for his clients, but neither one of us are fact witnesses or experts that can take the stand and talk about how cheese plants process things or how farmers deal with matters, and we just aren't people who should be taking the stand.

We can, of course, make post-hearing arguments based upon the evidence, and I think as one reads Mr. Yale's proposed testimony, it in many ways resembles post-hearing argument, and to the extent that the facts he relies upon are in evidence, he's allowed to make those arguments.

But I just don't see any circumstance under which he or I or any of the other of us who have entered appearances should be testifying.

He does have at least one other expert, Ms. Ledman, who's planning to testify. I'm not

entirely sure the scope of her testimony because she hasn't entered that written testimony or circulated it in advance, but Mr. Yale also presented several witnesses at the first go-round in Ohio, and so it's not as if we're in a circumstance where he is bare, so to speak, without appearing himself.

But we just don't see any appropriate circumstance for him to be here, and we would ask that Your Honor rule -- we've cited in our motion the basis. We would ask Your Honor to rule that his testimony is not appropriate, and that, therefore, it not be allowed.

The other part of our motion is a totally different subject. It relates to Your Honor's valiant effort to organize the hearing by having parties provide in advance of the hearing their written testimony, and I think Your Honor saw two goals there.

One is it would allow cross-examination to be sharper, more focused, and then, second, it would allow those of us who are opposing that -- the proposals for which that testimony is being submitted to at least start our preparations in opposition, although Your Honor indicated that

you wouldn't expect the opposition testimony to be submitted in writing, at least we could be moving forward on that.

A number of parties met the court's deadline, we certainly did with our witnesses, but some didn't, and so what do we do about it, that's the question.

There really are two true experts I'm aware of who I'm particularly concerned about. One is Ms. Ledman, who's here on behalf of Mr. Yale. The other is an expert for the Maine Dairy Association.

JUDGE PALMER: Is that -- is that your witness?

MR. SMITH: Yes.

MR. ROSENBAUM: Yes. And we're not seeking to exclude them. That seems to us to be a too extreme result, but on the other hand, we are asking that that written testimony be provided -- that their testimony -- that they provide written testimony in advance and that we get it 48 hours in advance of whenever they take the witness stand.

You know, under that circumstance -- you know, take, for example, Ms. Taylor, who's an

expert who will be appearing on our side, you know, her testimony went up on the USDA Web site Monday a week ago, people had a week to prepare to cross-examine her and to consider whether -- or what they might want to say in response, and I just think we're under too big a burden when we're not afforded the same opportunity.

As I mentioned in the motion, for example, the Maine proposal is sort of a radical idea. I don't want to argue the merits. I just mean it would be radical in the sense that it's very different than how we currently price things, and I would really like to see in advance what it is their expert says that is going to make that proposal work so I can figure out what we would say in response, so those are our two motions, Your Honor.

JUDGE PALMER: Let me go back. Let's start with the Ledman and Whitcomb testimony. I'll ask you, in the back, sir, Mr. Smith, is it possible for us to get a copy of Whitcomb's testimony before he takes the stand on Thursday?

MR. SMITH: Mr. Whitcomb's a farmer board member of the Association. In addition to Mr. Whitcomb, we retained Jana Magee as our

expert.

JUDGE PALMER: I guess it's Magee that we're talking about.

MR. SMITH: Yeah, that we're talking about. Just a little bit of background, Your Honor. The Maine Dairy Industry Association got into this hearing basically in December, I was retained in December. The formulation process for the issues involved in this have really been ongoing since last June, so we're a little bit late to the process.

As Mr. Rosenbaum says, the Association's proposal is somewhat radical, I would even accept the description; different, anyway, than the other proposals. The Department allowed the proposal to come in, but was unable to do the economic analysis because it was relatively bare bones because we really kind of -- we came in right during the public information process, so we're, in some sense, trying to catch up with the hearing process.

To the extent that we got continued from the last hearing, it was very helpful in that, as we only had two weeks' notice from when the hearing was notified to when we had to fully

develop the proposal and come up with the evidence in support of it.

In the ensuing five weeks I've been scrambling to put some flesh on bones. Mr. Whitcomb is intended to provide one part of the testimony, Ms. Magee another.

Ms. Magee's is the more technical piece of this, and she came on about two weeks ago. Last week her son broke his arm, so, you know, life intrudes in all of this. One of the fractures, he's in a cast over his elbow, he's six years old, so Jana called me in somewhat of a panic that she wouldn't even be able to come this week, so we've been working through that.

All this is just saying that the process of getting a written statement in front of everybody, I'm certainly not unsympathetic to everything that Attorney Rosenbaum said, so that's a piece of this.

The other piece is whether, in fact, we'll even get to Ms. Magee's testimony this week or whether we're going to be continued all the way through.

JUDGE PALMER: I hope we'll get to it this week. That was --

MR. SMITH: Well, I heard something similar the last time, but.

My situation is that if we're continued again, the more time I have to put this together I think benefits everybody as opposed to put something together partly, which gets to the third piece of the puzzle, which is that the proposal originally anticipated building off of what the Department did during the basic formula price hearing, so I wasn't starting from whole cloth.

It turns out the Department doesn't have the full record of what they did in the past. They've been extremely helpful in trying to find what they could find and we have an outline, basically, of what was done, so Jana and I are working through the outline of what was done as opposed to trying to build up a complete record.

So whether I can have something 48 hours in advance of Friday, I can do my level best. I would prefer a day, I'd prefer -- I'd prefer to get something in front of people, you know, quite honestly, but if the hearing's not going to get to the point of taking her testimony, then I'm not sure it serves anybody's purpose by

doing that, so I leave it to your discretion with all of that.

JUDGE PALMER: You're looking at her to testify on Friday --

MR. SMITH: I'm looking to her to testify --

JUDGE PALMER: -- if at all this week.

MR. SMITH: She's going to let me know at the end of today whether she can come. I left that out. She's trying to get her son in school. If he can go to school, she's going to try to come. I'll know better at the end of the day about that, and that'll obviously make a big difference as to how much she's going to be able to help me through the week getting it together.

If she's not able to come, then I'm scrambling to put somebody else in, and that in part depends on your decision with regard to Mr. Yale. We're in between myself and Mr. Whitcomb at that point, so.

JUDGE PALMER: Well, now we've heard from you. Let's hear from Mr. Yale, which you cover both topics. You can take the microphone if you want.

MR. YALE: I think I can --

JUDGE PALMER: You've got a good, strong voice.

MR. YALE: Go ahead, Garrett, you got --

JUDGE PALMER: I was going to let Garrett get in on this too.

MR. YALE: I want to talk just about Mary Ledman is all I want to speak about. Mr. Ryan Miltner will take care of the other issue, but I had the conversations with Mary, so it makes much better sense for me to talk.

JUDGE PALMER: Sure.

MR. YALE: At this point we don't have a prepared statement. She is going to testify only on the issue of the NASS versus the CME, not on any of the other proposals, and is going to talk about, you know, the time lag and the comparisons between what the CME is and what the NASS prices are and an explanation of how it would work with using the NASS -- or the CME instead of the NASS and some benefits in favor of it.

JUDGE PALMER: Could she get her statement in by this afternoon?

MR. YALE: I can call her when we're done here.

JUDGE PALMER: That way at least everybody can see it tomorrow. You don't get 48 hours, but at least you get the night to look at it.

MR. YALE: I can see what I can do.

JUDGE PALMER: All right. Let's do that. We'll leave both of them up in the air for a little while.

All right, sir, what about the testimony of Mr. Yale.

MR. STEVENS: Your Honor, this is where I'd like to make a statement, if I could.

JUDGE PALMER: Yes.

MR. STEVENS: Garrett Stevens, Office of General Counsel. We looked into this matter in the motion and Mr. Yale's testimony, and we have found a case, McDaniels -- McDaniel, I'm sorry, versus Toledo, Peoria and Western Railroad Company, 97 F.R.D. 525 (1983), District Court of Illinois, U.S. District Court.

It's not directly on point, but it stands for the idea that an attorney who appears as counsel for a party should not then later appear to testify as a witness. Once attorney makes a choice, the choice to appear as counsel, he waives the right to appear as a witness; kind of

the idea I think that was expressed earlier of picking a lane.

If an attorney thought he would later want to testify, he should not have agreed to represent the parties at the hearing. Withdrawing as counsel would not remedy, as his law firm continues to represent the parties here.

JUDGE PALMER: I hear you.

Go ahead, sir.

MR. MILTNER: Thank you, Your Honor.

Garrett, if I could ask, I have not read that case, I assume it's not a USDA case.

MR. STEVENS: It's not. And we're having the case faxed to us, so we'll have it hopefully in a few minutes or certainly today, and we'll certainly make it available to you.

MR. MILTNER: Okay. And if I can pull it up, I'll read through it.

And I had a couple points I wanted to make, Your Honor. I'll start with the ethical issue. We're Ohio counsel, obviously, and we're governed by the Model Rules of Professional Conduct.

Rule 3.7 states that, "A lawyer shall not

act as an advocate at a trial," and obviously this is an administrative proceeding and not a trial, "in which the lawyer is likely to be a necessary witness unless," and there are some exceptions. "Testimony relates to an uncontested issue; testimony relates to the value of legal services," or in particular in this case, "disqualification of the lawyer would work substantial hardship on the client."

Now, I'll be the first to admit that this is a first for Mr. Yale acting as a witness in a Federal Order hearing, but given the opportunity to voir dire Mr. Yale, I think you will find that he serves a dual role for our clients and has a background in the dairy industry that's unique among all the attorneys in this room.

For instance, he has served as the manager of a cooperative and has background that others may not bring to the Department so that they can evaluate our proposals.

He would also offer testimony about the services that he provides to our clients, including the proponents and the cooperatives that have sponsored these proposals, and can bring that through voir dire so Your Honor can

make a decision on this issue.

I also want to point out that while this is a first for Mr. Yale, this is not a first for Federal Milk Order hearings.

In particular, and I don't have -- I was not at the hearing, but I understand that at one point Mr. Vetne had appeared as both counsel and witness at a hearing for his clients.

In addition, it's not uncommon at all for a witness, a proponent or an opponent of a proposal, to both stand at the podium and cross-examine witnesses as an advocate and appear and present testimony as a witness.

Some people who have done so just in the recent past: Dr. Cryan for National Milk Producers; I believe, but I'm not positive about Mr. Wellington for Agri-Mark; Mr. Schad for Land O'Lakes has done so, including in this hearing. Gary Lee from Perry Farms I believe has appeared on both sides of the podium.

Clayton Galarneau with Michigan Milk Producers Association has both questioned witnesses and provided witness testimony.

When he was with Northwest Dairy Association, Doug Marshall, an attorney, had

provided witness testimony on pricing formulas in particular and served as counsel, and I believe, although I'm not positive, appeared in a subsequent piece of litigation on the issue.

And I also believe that Mr. Brown now with MDA has appeared for National Jersey and for MDA as a witness and a cross-examiner.

As I said, Your Honor, this is not an adversary proceeding. It's an administrative proceeding meant to flesh out the details of any particular proposal.

The ethical rule that I cited and I believe was probably referenced in the McDaniel case talks about prejudice to parties when a fact finder and trier of fact can't separate the role of an attorney and the role of an advocate.

I don't think that the Secretary's going to have that issue here.

We also in this hearing have admitted people to testify as experts, but, in fact, the Secretary always affords each witness, whether a lay witness or an expert, the due weight that their testimony is accorded. There is no special designation as an expert witness in these proceedings. It affords them no special

status. There's no requirement that a person at the podium need to be an attorney, nor that a person on the witness stand need be a non-attorney. We talked about that a little before.

Now, I want to touch on the issue of providing copies of the statement. There are some statements in the motion, Mr. Yale had advocated a particular deadline during off-the-record discussions, the motion doesn't mention that, but I believe they were off-the-record discussions, and while we attempted with all diligence to get Mr. Yale's statement before the deadline, it simply was not feasible to provide a reasonably complete copy to the other parties, and it was provided as soon as it was reasonably complete.

JUDGE PALMER: When did you provide that? When was that?

MR. MILTNER: I believe it was on Wednesday.

JUDGE PALMER: Last Wednesday?

MR. MILTNER: Yes. Certainly more than 48 hours that they're asking for with regard to the other witnesses.

We're prepared to put Mr. Yale on for Direct testimony and Cross-Examination right now. If Your Honor chooses, we could do Direct testimony today and hold Cross-Examination until the others have had a chance to review both his statements and the exhibits.

JUDGE PALMER: Let me ask you this. You're going to have Ms. Ledman here. She's an expert, is she not? What's her background?

MR. MILTNER: She has an extensive background with the Chicago Mercantile Exchange and forward contracting, cash pricing on dairy markets.

JUDGE PALMER: Would she be qualified to pretty much give Mr. Yale's statement?

MR. MILTNER: I don't believe so. Mr. Yale's statement speaks to the other proposals. She intends to testify only on the issue of the Chicago Mercantile Exchange.

JUDGE PALMER: You don't have anybody else here that could cover this ground?

MR. MILTNER: I don't believe so, Your Honor. I know we don't have them here. And we've worked with our clients, and I think if you had the chance to voir dire Mr. Yale, you

would understand that he serves that role for our clients.

Mind you, also, in the Ohio ethical rule that I cited, an attorney in a firm may appear as a witness as long as the attorney doing the questioning is from the firm, and so in that case, I would, for instance, be able to examine Mr. Yale in a trial setting because the fact finder could differentiate between the role of attorney and --

JUDGE PALMER: I've had a couple of odd things happen in hearings. I had a -- I actually had a Government attorney, one of your former colleagues, Mr. Stevens, what was his name. Al Caney. Remember Al? Al got up -- there was some disciplinary case and the next thing I know, he jumped on the stand and was giving testimony. I couldn't quite figure it out, but it happened, so we've had these confusions.

Apparently, Mr. Vetne, your name was mentioned here. Did you give testimony once?

MR. VETNE: Twice.

JUDGE PALMER: Twice. Mr. Beshore, what do you think?

MR. BESHORE: Well, I just wanted to comment on the second part of Mr. Rosenbaum's motion, the 48-hour rule. My clients support Your Honor's adherence to that rule and we think it's -- you know, it's important in this kind of proceeding, especially one that's as long -- that's as long and involves as many people as this, that when the presiding officer reasonably uses some discretion to bring some order and, you know, greater efficiency to the proceedings, that it should be adhered to. And if, you know, if Your Honor's -- and we think it should be adhered to. It's reasonable. The experts' statements should be provided at least 48 hours ahead of time and they shouldn't testify until everybody's had 48 hours. I mean there's no point in even going through a charade of having these types of admonitions where people abide by them, you know, and meet them and then others find ways around it, such as not testifying from a written statement or something of that nature, so we support that portion of the motion.

I think -- the only comment I'd make, Your Honor, on Mr. Yale's testimony itself is I think that it's not an ethical issue per se. I mean

we're not here to propose -- or to administer the Ohio Rules of Professional Responsibility.

I think that the testimony -- there is an issue of competence in the sense of whether the witness is speaking just as an advocate, that is, as a person briefing the material, or with respect to specialized knowledge and personal experience, and it could well be that Mr. Yale with respect to some, much or all of it qualifies in that respect or has some ability. The suggestion in terms of voir dire I think probably could be -- could be useful.

JUDGE PALMER: All right. Well, let's talk about Mr. Yale testifying first, go backwards and do it the other way around. We sort of heard the other part and then we heard about Mr. Yale, but I think I want to talk about that first.

Apparently we do have some people coming to these hearings and acting in a dual role. Mr. Vetne admits to having done it twice.

I think it's a bad practice. I shouldn't -- I don't want to use bad. Bad's too strong a word. I think it's not a good practice. And the reason I think it's not a

good practice is that one of the things we try to do in these hearings is assure the dairy farmers of America that the marketing orders that we put together, the Secretary puts together that regulates their milk prices and milk checks that they're going to receive was done on a careful, thoughtful basis and consists of looking at testimony from other dairy farmers, from economists, etc., etc.

I think if they start thinking that it's just a lawyer's thing, where lawyers kind of get on the stand and tell you -- give you their theories and then the Secretary goes along with the lawyers, I don't think that's good for the process. I don't think it helps the marketing order process have the type of respect it should have of dairy farmers.

I would prefer if someone else could take the stand in Mr. Yale's place. I don't know if that can happen.

MR. MILTNER: Your Honor, we had for Strongsville attempted to line up experts to -- or cooperative employees to testify on these issues. The fact of the matter is that our clients are not small, but not large

cooperatives, and they have neither the staff to have a staff person do these issues, nor do they have the staff to staff economists and, quite frankly, on issues relating to processing, the universe of experts is extraordinarily narrow. And if we could have avoided having Mr. Yale testify, I assure you, we would have.

But in our opinion, the rules do not preclude his testimony, and whether it's an ideal situation or not is one that you and I may agree on, but the rules don't prohibit it, and we would request that he be permitted to offer his testimony.

JUDGE PALMER: Well, I'm going to allow him to do so, and I'm going to do it on this basis. A, I agree with Mr. Beshore. I don't see the ethical issue here. I think we can separate out Mr. Yale's functions as an attorney from his functions as an expert.

I didn't realize he had managed a dairy cooperative. Was it a dairy cooperative?

MR. MILTNER: Yes, Your Honor.

JUDGE PALMER: So we will allow some voir dire to find out about the expertise. The real point then will come down to whether or not the

testimony he gives is entitled to be given weight, and that'll be found out I guess through the voir dire as to how much expertise he has on the subject matter.

Having said that, I would have preferred we didn't do it this way, but my main function is to make sure we have a complete record and that we identify in the record which materials the Secretary can rely upon and which he cannot, and provided that any factual data that Mr. Yale gives, he can show he has some kind of expertise or background for it, we'll let that be evaluated by he who writes the decision.

And, of course, the decision is always subject to a petition for review on the basis that it's not founded upon good and qualified evidence, so that's -- that's a problem that goes to the particular proposals you're going to be making, so if it's got an Achilles heel, it's going to have an Achilles heel. So we'll let him testify.

As to the other folks, I really do think they should try to get their statements in before they testify. This is Monday, it's the afternoon, we're not talking about anybody

taking the stand until -- I think in the case of -- let's see, what did we say.

I'm using the same pad I had from the other hearing.

Yes.

MR. SMITH: Your Honor, if I could make a suggestion. If we could revisit Ms. Magee's testimony Wednesday morning, I think at that point we'll have a better sense of what the hearing schedule looks like as to whether she's even going to get on, as well as what her real availability will be, so if we could --

JUDGE PALMER: We'll revisit Magee on Wednesday. And what about Ms. Ledman?

MR. MILTNER: We're checking right now, Your Honor.

JUDGE PALMER: All right. She's due -- we're talking about her coming here tomorrow, and we could -- we could do a couple of things. We could move her over to -- we're going to have a lot of people on Wednesday. Are you checking on it right now?

MR. MILTNER: Yes.

JUDGE PALMER: Okay. Let's take a short recess until we can hear on that. Let's go off

the record.

(At this time a recess was taken.)

JUDGE PALMER: We're back on the record. We had interrupted it for a moment to see what might be the situation with Ms. Ledman and getting her statement in to us.

MR. YALE: We're going to be able to have a statement from her by later this afternoon, she said late this afternoon, in which case we can distribute it, and she'd be available tomorrow morning or Wednesday morning.

JUDGE PALMER: All right. What would you prefer, Mr. Rosenbaum? Would you prefer that we hear from her Wednesday morning?

MR. ROSENBAUM: Yes, we would.

JUDGE PALMER: Why don't we call her Wednesday morning.

MR. YALE: All right. Can I tell her that right now?

JUDGE PALMER: Yes, you can take a moment for that. I don't want to lose you again, you're the witness.

As I understand, the testimony -- the written testimony today, her on the stand Wednesday morning.

MR. YALE: Yes.

JUDGE PALMER: Everybody stay put this time.

(A discussion was held off the record.)

JUDGE PALMER: All right. We're going to go back on the record.

BENJAMIN F. YALE,

having been first duly sworn in by the Judge, was examined and testified under oath as follows:

JUDGE PALMER: We're going to start with the voir dire, and give your name first.

MR. YALE: My name is Benjamin F. Yale, and my business address is 527 North Westminster Street, Waynesfield, Ohio, 45896.

MR. MILTNER: Thank you, Your Honor. This is Ryan Miltner again with Yale Law Office.

VOIR DIRE EXAMINATION,

QUESTIONS BY MR. RYAN K. MILTNER:

Q Mr. Yale, could you give for the record first your educational background.

A All right. I graduated from Yale College in 1973, and worked for four years, really had two things I was doing. The primary money maker was working with computers and providing computer

processing, including some dairy clients.

And then I attended Ohio Northern University School of Law, and graduated there in February of 1980 and took the February bar and was admitted in May of 1980 to the Ohio bar.

Q You've been practicing as a lawyer since May of 1980?

A Yes, I have.

Q You have background in the dairy industry?

A Yes. As I said, from 1973 until 1980 I was a consultant, computer consultant for National Farmers Organization, and developed their producer payroll system that was used at that time in all of the East. There was a number of orders. We developed a methodology in which to computerize what was at that time a hand system of computing -- collecting data and computing and preparing producer checks and reports in that regard.

And then during that period of time I was also employed full time by Fisher Cheese Company of Wapakoneta, Ohio. In that position I served as a systems analyst, and one of the tasks that we were involved in in that systems analyst is we were installing a MAPEX system, a

manufacturing -- I can't remember now what the term stands for, but basically it was to computerize the processing of information as far as where inventory was at, where final product was at and all the steps involved and stuff like that, and part of that was interfacing with the cheese makers and trying to find some way to take what is very much for them -- for them was very much an art and putting it in the form of something that was more objective that we could deal with the computers.

And then upon completion -- or admission to the practice of law in 1980, I was employed full time by the National Farmers Organization out of Celina, Ohio. We managed as a Capper-Volstead cooperative milk marketed -- everything east of Illinois and Wisconsin and south. We were involved in Maine, we had producers in Maine and New Hampshire, New York and New Jersey and Pennsylvania and Ohio, Michigan, Indiana, Kentucky, some in Tennessee. We were trying to develop some stuff in the Southeast. We had markets in all of those areas that we worked in.

And the responsibilities I had there, in addition to continuing to expand the

computerized network to a nationwide system for National Farmers, which included not just the producer reporting but the billing and some other functions, we also -- we were involved in negotiation of pricing. And my first introduction into some of the arcane issues we're talking about here with the Van Slyke formula was in the -- began in 1980 when we began a program to provide special pricing for what we call colored herds, Jerseys, Guernseys, Ayrshires, Brown Swiss, I'm sure I'm missing somebody, and to develop that, and instead of the skim butterfat program that was common, even up until recently in the rest of the system, and we started to negotiate special pricing for those producers, so I was involved in that, and in the marketing of the milk and in the pricing of the milk and the negotiation of the prices and sometimes finding a place to put a load of milk that we had no market.

And then also as part of that, I became very active in participating in the Federal Orders, and started -- I think my first Federal Order hearing was in June of 1980, and attended and participated in many since then.

So that's the experience there. I don't know where -- I mean I guess I can continue to go on.

Q I will ask a few more questions, but there are a couple things I want to clarify. All of the dairy-related tasks and jobs that you just described, none of that was in a capacity as an attorney per se?

A No, other than, you know, working with the Federal Orders, I was, you know -- I mean there was that capacity, although, as has been pointed out, the participants, active participants at the hearings, and I think more so then than now, were done by a lot of non-lawyers, so.

Q And when you use the term "we," we would go to Federal Order hearings, when you said "we," that was you and others, but you were involved every time you said we; correct?

A Yes, in those hearings in the areas in which I was involved. And there were others, National Farmers had others, I mean Mr. Beshore represented National Farmers in some of those and we worked together and I handled some and he handled some, so, yes.

Q Now, you started out in computers --

A Yes.
Q -- for these cooperatives and cheese companies developing producer payroll for National Farmers Organization. Did that require an in-depth knowledge of the pricing formulas and the basis for them?
A Yes, it did. In fact, that's why we were successful out of our office and it began to grow and they finally asked them to bring me on and go nationwide in that we were the first to be able to develop a system that could handle -- at that time there were a wide variety of methods that producers were paid. We had base excess programs, as I recall, in the old eastern Pennsylvania, New Jersey, whatever the name of that order was; we had a base excess program in southern Michigan order; the Southeast had their own base excess, they're all different, and then we also were dealing with at that time when I first began three grades of manufacturing grade milk. We had canned milk, we had the others, and trying to come up with a system that was consistent for all of them, that was the task, and you had to learn how the milk was priced.

And then the -- we did preliminary -- I

never ended up drafting the program because I think they ended up closing the program, but I want to say the Black Hills or something started a component pricing back in the '70s, '80s, and we were doing some work there, but then when it came to 1980 and we started doing the colored herds, we did have to develop some system to be able to pay on a component formula because that was not what we would have been doing before.

Q When you talk about component pricing and colored herds, that would require a specific knowledge of protein and butterfat and other solids and the components that are at issue in the pricing formula in this hearing?

A Yeah. Yes. I mean it was the beginning of that process I think of component pricing that led to us -- led the industry to where we're at today.

Q In particular, it was important for you to quantify the value of those components?

A It was important to understand the value and how they interrelated and how to compute them so that there would be a fair price that the plants would pay and a fair price that the producers would receive. And then we had the added complexity that we had to pool it within

ourselves, within our system, and try to come up with a fair way to allocate that money to the people who produced the protein but at the same time not overcome the producers who otherwise had no -- the Holstein milk primarily.

Q And as a systems analyst for the Fisher Cheese Company, was it important for you to understand the process of how they made their products?

A Well, that was the real eye-opener was to find out all that went into the vat and the work that was done at that time to make those cheeses, yes.

Q What kind of cheeses did Fisher Cheese make?

A They made -- one of -- their more common one was -- and I know if there's anybody from Kraft, I apologize ahead of time, Fisher Cheese is no longer in business so I think I can be a little more open in this, but it was a Velveeta-type called Chef's Delight which was a processed cheese, but they also had a natural cheese division and they made -- I think mostly more in the cheddars and American style cheeses. And then they bought an awful lot of cheese and a lot of powder and a lot of products to make their various cheese products. And then they

were also one of the earlier people into the synthetic cheeses. They developed a number of synthetic proteins or replacements to make some artificial cheeses.

Q In your work with the National Farmers Organization, you did -- did you have interaction with buyers of their raw milk, the members' raw milk?

A Yes.

Q What would that entail?

A Well, I mean it was all kinds of things. We were always responsible for producer relations regardless of what position we were in, and dealing with the issues in terms of quality and the pricing and hauling and all of those things. You know, the producers and the processors, it was delivering a quality product and trying to, you know, meet their demands and have pricing, and also part of that was we would always get into disputes over the methodologies in which the butterfat was tested or the milk was weighed or those issues because that was an ongoing debate to make sure that we got paid for all we delivered, and obviously the plants didn't want to pay for what they didn't get delivered, so we

were very much hands-on approach with them.

Q So things like farm-to-plant shrink, farm weights and tests, plant weights and tests were all within your job description in some regard?

A Yes, I had several projects in which that became a major issue, particularly with some modeling plants that we delivered milk to.

Q At some point did you cease being employed by NFO?

A Yes. I stopped being employed by NFO in the end of '86, early '87, went into the private practice of law completely, although I still had a practice, I was putting in some pretty long days during that whole period of time, but went solely into the private practice of law.

And in that period of time I began to work with and organize a number of dairy cooperatives, primarily -- well, they were all over. I mean I formed cooperatives in New York state and worked with them, in Pennsylvania, Ohio, Michigan, Wisconsin, Alabama. Seems like I'm missing some there initially. I even formed a couple dairy cooperatives in terms of marketing milk, one in Pennsylvania and one in Ohio.

And then the practice -- and then also represented from time to time other participants in the Federal Milk Program that needed help, and those included handlers as well as producers. We had, you know, key herds and cheese plants and bottling plants all over and represented some of those in Federal Order hearings. It became very steady in terms of about all I did starting in about '94, '95 when we formed Select Milk Producers in New Mexico and Elite Milk Producers in Texas, and then those two merged and are now part of Select.

Q Select Milk Producers and Continental Dairy Products, do you continue to work for those two?

A Oh, sure. I mean, you know, my role began to be more -- it was not just the legal stuff, but I was the one that did -- right after '94 we got into the Farm Bill of 1995, and one of the hot issues in 1995 was the -- how are we going to price milk.

Well, let me back up. In 1993, I think it was, we had the basic formula price hearing; have I got that year right? It's getting too long. 1992 I've been told. And I represented the Wisconsin Cheese Makers at that hearing in

trying to come up with -- and I think our proposal there was a combination of a -- what do you call it, a competitive pay price and also some kind of end product pricing, and was very much involved in helping to develop that once I was on board with that, and then that carried forward. We got into 1995 and 1996, and we -- which ended with the FAIR Act, I was involved in lobbying on the Hill and involved in where the Farm Bill was going to go, and Federal Order Reform was a big issue at that -- as we all now know in retrospect, it was a huge issue because it got us to where we're at today, and after the FAIR Act was passed in the early spring or late winter of 1996 we had this process of Fair Order Reform, and in that time I began to develop proposals for -- there was also another client that I started to work for was Dairy Producers of New Mexico. And Dairy Producers of New Mexico is comprised entirely of individual dairy farmers, there's no cooperative members. And we had a number of cooperatives that were members of Dairy Producers of New Mexico at the time, still are, but I mean there were a lot more cooperatives then, and they teamed up with other

similar organizations in the West and created an organization called Western Dairy Producers -- Western States Dairy Producers Trade Association. And we took a very active role in participating in the informal rule making and presenting proposals to the Department, I think again kind of proposing a combination of competitive and end product pricing, but at that point end product pricing was very much a part of it, very similar formulas that we're using today, and I had to understand that.

So my concern and the concerns of my clients, and they were expecting from me to be able to report to, was what does this do to our bottom line, because one of the real problems with component pricing was that they could say okay, we raised the make allowance. Well, that's a bad thing for producers and a good thing for plants, and I'm saying well, it depends on how it all fits in the mix, I mean what's all in the mix, so early on I developed a -- I called it a model. After hearing Dr. McDowell at the last hearing, it was a big spreadsheet, okay. And in a way that I could look at and be able to explain to my clients

that if you make this change at this step of the formula, this is how it impacts you in a blend price, because producers don't receive class prices, they receive blend prices, that's all they cared about, so that was fairly involved.

And then we developed the model to the point that we could -- I think by the time that we stopped using it, which was after the hearing in 2000, maybe there was some follow-up to that, we could handle 54 different variables in that process, in this model I completely developed myself to understand the formulas, and then if somebody come in and says what if we change the barrel spread to one and a half cents, what's the impact, and we could run it, you know, and we could run it against at that time three or four, now it's about seven or eight years' worth of data and say this is how this would actually work into your blend price.

And then obviously the -- the announcement came out in April of 1999 that USDA issued a Final Decision in Fair Order Reform, and I -- my task was to analyze the impact of end product pricing that was in that formula, what that did to dairy producers and how we wanted to respond.

And I came out and was one of the first to announce that this was going to have a negative impact of about 50 cents on producer income compared to current formulas, and was active in explaining that and lobbying Congress and we were successful in obtaining legislation in 1999 that told the Secretary you got to hold a hearing in May of 2000 to present this -- to allow people -- because that was an informal rule making hearing. And so one of the questions we had, we never really had a chance to respond to that, so Congress ordered it. We had the hearing in May of 2000. It was a five-day hearing. We had proposals from Western states and others I represented there, I understood those formulas, had to understand them back and forth, had to understand the impact of the formulas and the changes that other parties had as their proposals to change the orders. That was my responsibility, in addition to just pushing our cause and getting witnesses and getting testimony into the record.

And then when the Tentative Final Decision came out in the end of 2000, it was to analyze what its impact was again and make that report

to people. Of course, we had some more litigation over that, over the Class III, IV butterfat. One of those rare instances, Your Honor, I think everybody in the industry was on the same side of the table. That's the only time probably ever it will happen. And then after that just following the Tentative Final and the Final Decision that came out I think effective in 2003, so I was very active in all of that.

And then obviously as these processes began, began to be active in terms of understanding the formulas. And my job to my clients was not just to be an advocate of those proceedings, but was to analyze it and tell them what the impact was. And I put on presentations to the farmers that were members of our boards and sometimes our membership and explained how the formulas worked and what the policies were and if you do this, this is how it works and so on and so forth and came to be relied upon to do that, so that's that in the pricing formulas that we have today.

The cheese pricing -- well, I'll let you ask the questions, but we haven't gotten to

that. That's another issue.
Q My question is does all of that policy development and analysis that you've described throughout that process, in your experience, is that something that is predominantly done by cooperative employed economists and analysts or something that their legal counsel handles?
A Almost entirely on the way the formulas worked and their impact, the communications were with the men and women in the industry, both on the proprietary and the cooperative side who did that function.
Q So was your ability to do that type of analysis premised on your law degree or your legal representation of your clients or your work with the National Farmers Organization and Fisher Cheese and other entities in the dairy industry?
A I think it was -- well, obviously to be able to practice law, I think it makes you a smarter person in terms of being able to function, but.
Q Obviously.
A The -- in terms of the actual skills, I would say that they were independent of that.
Q Now, as you continued to represent your clients following Federal Order Reform, I want to talk

specifically about your work for Select Milk Producers.

A Okay.

Q Did you have the opportunity to be involved with the -- the feasibility studies and the eventual construction and ownership of a cheese-making facility?

A Right. I mean I had several roles in there, but I'm not going to talk about the legal role and those representations there, but because of the absolute familiarity that I had with the formulas, I -- and, by the way, one of the other things I forgot, an important part of the FAIR Act, I also worked with a group of producers out of California and actually wrote up and proposed a Federal Order for California, complete. I called it the Order 1049 I think, the 49ers, but, anyhow. And that involved understanding their formulas and trying to find a way to meld and to go into this other system.

But, anyhow, to answer your question, yes, on the cheese, because of the familiarity I had with the formulas and the familiarity I had with California, we began a process in 19- -- well, it was really before that, we looked at some

Gouda, we were going to make a Gouda plant. We actually transported the plant over from Holland and built it in Roswell, New Mexico, and produced the cheese for a while to see whether it was going to be good enough to meet the Comarco standards, but it didn't go for I don't know what reason, but the process got to be -- obviously we decided that we were going to be in the business, we thought we would at that point, and it was very important to understand how these formulas worked on both sides, so one of the tasks that I did, one of the responsibilities was to develop a mathematical process, a mass balance sheet that actually took through all the products so we could identify all the products, look at where they went and began to, from that, develop pro forma balance sheets and income statements to determine the profitability of the plants, but also to begin to look at, you know, what kind of product mixes did we want to have in the plants and, you know, how much milk was going to be needed and all those other things, so that again was another model. And then we would use that both from the standpoint of where we wanted to be. Then as we

began to negotiate with other parties, we used that information to be able to determine whether or not, you know, we were getting a good deal or whatever, so, yes, I mean that was -- that was the carryover into that process.

And then went beyond just -- that was -- the model then that I developed then would be -- was put side by side by others who had done the same thing on the other side, and the methodologies were virtually identical, and many times we were able to -- the small things that we would have to make changes, but we could generally come to an agreement what those numbers would do.

And then that also evolved, we did some analysis on some other types of plants, you know, other products to see whether it was feasible to make or not and that type of thing, so.

Q And I think it's in the record, but Select Milk Producers is a part owner of the Southwest Cheese Company; is that correct?

A Select Milk is a partner in a partnership that is a part owner with Glanbia.

Q And Southwest Cheese?

A And Southwest Cheese, yes.
Q And the process you described was part of early -- the early beginnings of Southwest Cheese?
A Yes. I mean we danced with a number of partners and eventually ended up with a very good company; and not that the others weren't, but this was a very good fit.
Q And any of the information in your statement draws upon your professional background in the dairy industry and your general knowledge, but doesn't speak specifically about any knowledge about Southwest Cheese Company; is that correct?
A I've tried to remove anything in there that -- and we'll explain that later on, some of the specific places we've done that, absolutely, yes. Whatever I learned there was entirely proprietary information, but the methodology that we used was consistent, and was consistent with everybody else's, so.
Q Is there any other background you wanted to set forth before the Department?
A I mean other than just understanding -- I think it's just incumbent to understand how these formulas work and all their intricacies to be

able to provide the information to the Department how it works.

I mean one of the -- so let me just share this to share with the judge's concern, and I certainly don't feel comfortable being up here as a witness, and then when the economists start asking questions of me, then I'm going to really feel the world's got turned upside down, but, you know, if you were to go to them and ask them who does your -- who understands the pricing formulas, I'd be the one, and I just play that role and it's just a dual role, and that's just the way it's evolved.

MR. MILTNER: Your Honor, to the extent that additional voir dire from others in the room is requested, we'd be willing to offer that, but we believe that Mr. Yale is qualified. To the extent he wouldn't be considered an expert, the Secretary can accord his testimony whatever weight he sees fit.

JUDGE PALMER: All right. Questions on voir dire?

MR. ROSENBAUM: I'd like to be up.

JUDGE PALMER: Mr. Rosenbaum.

VOIR DIRE EXAMINATION,

QUESTIONS BY MR. STEVEN J. ROSENBAUM:

Q What is your undergraduate degree, Ben?

A My undergraduate degree was in linguistics, and at 19- -- late '60s, early '70s at Yale the linguistic department was a carryover from efforts to computerize the translation of language which today is very common, so we were very heavy into computers and modeling by computers of those types of things, but that was the -- that was the major.

Q Now, when were you last employed by the Fisher Cheese Company?

A '79.

Q So that's 28 years ago?

A No, I think it'd be like 18 years ago. Twenty-eight years ago?

Q Yeah, afraid so.

A Oh, to be 30 again, but, anyhow, go ahead.

Q And your job title there was?

A Systems analyst, and I worked in the computer department.

Q All right. And is that the only position you've held where you actually were an employee of a cheese company?

A Yes.
Q And then you were employed by the National Farmers Organization up until 1986 or 1987; correct?
A I started in -- I think it was June 1st of 1980 as a full-time employee. I mean prior to then, I mean for the seven years leading up to that I was over there on an almost weekly basis consulting and developing the software and expanding their system.

But I started there, and I think my last day was maybe January some of 1987.
Q And is that -- and at that point did you open the Yale Law Office, or had that already --
A I had been operating part time -- well, you know, like I said, I'd get up on Monday and go to bed on Friday night, I mean it was long weeks, but I continued to operate as a lawyer in a lot of small town practice stuff during that period of time as well.
Q Okay. And was January 1, 1987, the last time you were an employee of someone else? Last time you had a W-2 form, for example?
A Well, other than from my own company, yes.
Q And your own company is?

A Yale Law Office. I mean, you know, you asked the question W-2, and I do get a W-2 the way we're set up, so.
Q I see. You're an employee of your own law firm --
A Yes.
Q -- as a technical matter?
A Yes.
Q And have you received W-2s from any entity other than your own law firm since January 1, 1987?
A Well, I was an acting judge for a number of years for Auglaize County and I received, you know, W-2s from them.
Q Anybody else?
A Not that -- I mean not that I can recall at this time.
Q Okay. Now, you have -- in your statement, I think you make -- well, let me back up. I assume when you do work for your clients, you send them monthly bills; is that right?
A I bill them, yes.
Q Periodically?
A I mean they're periodically billed.
Q And those go out under the letterhead of Yale Law Office; is that correct?

A Yes.
Q Now, you describe yourself in your testimony as being general counsel and regulatory affairs consultant to Dairy Producers of New Mexico and other entities; is that correct?
A That's -- for Continental, Select and Dairy Producers of New Mexico, that'd be correct. I just provide legal services from time to time in addition to this for Lone Star and occasionally Zia.
Q When you serve as a regulatory affairs consultant, do you bill that time on the letterhead of the Yale Law Office?
A It's all billed the same, I mean in a similar manner, whether -- you know, whatever the terms are, they are.
Q And regardless of the role you're playing, the bill that would be received by your client would be on the letterhead of Yale Law Office?

MR. MILTNER: Your Honor, I think -- I understand what you're trying to get into, but the actual billing practices of the firm are irrelevant.

JUDGE PALMER: Well, he's trying to get a little background. I'll allow it. Objection

overruled.

A Yeah, I'm trying to think how far I can go without getting too much out of the confidentiality area, but I would say that they do not get a separate invoice from something that is other than the Yale Law Offices for the services that I render regardless of the purpose.

Q And you do serve as legal counsel for all of the entities upon whose behalf you are here to provide testimony today?

A Yes. And I have, in fact, represented them in various court proceedings as well as hearings before the Secretary.

Q And you're not an employee of any of those entities; correct?

A I am not an employee.

Q Are you on any of their boards?

A No.

Q Do you have an ownership interest in any of them?

A No.

Q Now, your Web site lists practice areas as including, in addition to agricultural dairy law, litigation, environment appeals, business

formation, lobbying, estate planning. Do you do all of those things yourself?

A I mean the answer is yes or no, although I think in the last -- I can't tell you how many years, we keep fairly detailed records of the tasks that we do, and I think for the time that I spend, it's well into the upper 90s that's involved with the dairy issues.

Q But you do -- you do or have in the past done all the other things?

A Oh, yes. We at one time -- we've done a fair number of appeals, not just in dairy, and we do some estate planning, although that's others in the office who are doing the bulk of that, and --

Q You do some of that yourself?

A You know, I mean to the degree I can provide advice as a senior member of the firm, that's, you know -- I mean I don't know that I really draft anything like that anymore. Not that I couldn't, I just -- I'm so involved in the dairy issues, I just don't have time.

Q Are you a consultant for any entity for whom you are not also legal counsel?

A Yes.

Q Who is that?
A The one I'm not allowed to tell at this point. The relationship has been asked to be confidential. And I have done -- I provided some advice, you know, in terms of some other formulations and stuff to different companies. I'm just trying to think of some that I can name. I got to think about that for a second. I know that I'm actively involved in one right now that I'm just not allowed to --

JUDGE PALMER: We're going to let you pass on that, claim confidentiality on that, professional confidentiality.

Q What happened to Richard Seguin who was going to be your processing expert?
A Well, again, I think I'm going to get into an issue that I really don't want to talk about because of the relationship with the client and that, but it was just not going to be able to work, I'll say that.
Q I'm sorry, I couldn't hear that. It was not --
A There is a -- an issue in the relationship with my client that it just was not going to work. I really cannot say any further.
Q And you don't own a dairy farm, I take it?

A No, I do not.
Q Have you ever worked on one?
A Not in a paid capacity, no.
Q And --
A I mean my -- my family owned one when I was a kid, but.
Q I take it you have no formal training in economics; maybe took a course or two at Yale, but beyond that --
A I do not have a formal degree in economics, no.
Q Okay. Or food science?
A I do not have a formal degree in food science.
Q Have you ever taken courses in food science?
A Nothing formal. I mean when I -- what I end up doing, and -- I end up buying the textbooks and reading them, which, by the way, you do bring up a point, I mean part of the formulation is is that we have become increasingly involved in issues of standards of identity and labeling and patent, and I supervise the patent issues and the intellectual property, and understanding the formulas and how they work and the processes is almost an -- I don't know how you could do it without knowing that, but, so, anyhow, go ahead.
Q I think my question was just whether you had any

formal training --

A I've had no formal training in food science.

MR. ROSENBAUM: That's all I have, Your Honor.

JUDGE PALMER: Any other questions for him? Anyone else on voir dire? Mr. Beshore.

VOIR DIRE EXAMINATION,

QUESTIONS BY MR. MARVIN BESHORE:

Q Ben, just a question or two about your NFO years.

A Yeah.

JUDGE PALMER: His which years? I missed that.

MR. BESHORE: NFO years.

MR. YALE: NFO years.

MR. BESHORE: Yes, the NFO years.

Q From 1980 through early '87 when you were an employee for NFO, can you just describe a little bit more what support you had professionally within the organization in terms of your responsibilities. I mean how much were your responsibilities -- you know, what were your responsibilities and how did they break out with other folks there? Did you have staff economists supporting your role or --

A You know the answer to that, Marv. You know, they --
Q I'm not testifying, Ben.
A I know that. You had some very smart but not formally educated people at NFO who understood these systems very, very well, and my role was part of -- and it would vary depending on the task involved, but we did take on that role of doing all the economic analysis that we would do, I mean whatever it was. I will say sometimes it was pretty rudimentary, but we did all of that in-house ourselves and I was very much a part of that.
Q Now, I think you described your role as manager or something.
A I was assistant manager, and it varied as the territory changed. I think when I left it was the Great Lakes Gulf Region because the Northeast had been spun off.
Q You were assistant manager?
A Assistant manager in charge of dealing with Federal Order issues and pricing, but we were -- you know, it was a small company and you didn't tell somebody that wasn't your job, you just did it, you know. So we ran samples, we sold milk

and all of that as well. I mean we had to get a job done. You know, if you don't sell it, you smell it. You had to move it.

Q So as assistant manager you were responsible for the milk marketing operations?

A Right.

Q In the region from Wisconsin east?

A At one time we included -- we had an office in New Hampshire, and the name -- the place escapes me now.

Q Rochester?

A Rochester, New Hampshire, yes, just inside from the Maine border, and most of the milk was in Maine and northern Vermont, as I recall, and then we had milk up around the Albany area of New York, we had it over in the Jamestown area. We had milk in the western Pennsylvania, around Sharonville. We had milk in New Jersey.

Q As well as the Midwest?

A The Midwest. I mean we had milk in Michigan, all through the region of Ohio, Michigan and Indiana. We had milk in Kentucky. Seems like we had some producers in Tennessee, and we were trying -- when I was still there we were trying to break into the South, but the base -- the

base excess system coupled with the -- a number of other issues kept us from doing that, and that finally broke after the whole herd buyout came out, but by then I was leaving, so I don't know what -- I don't know what happened after that.

Q Do you have any recollection of approximately how many producers you were marketing milk for within that geographic region for which you were the assistant manager?

A You know, I have forgotten, although I got to tell you that I got a couple single producers today that come pretty close to the amount of milk we marketed, but it was hundreds and hundreds. The one number, it seemed like at one time we had 550, and I could be off on this. I mean it's been, as you mentioned, maybe 30 years ago. Seems like we had over 500 or so in Ohio.

Q And at that time you were marketing both Grade A and Grade B milk?

A We had Grade A and Grade B, and then we had -- in Michigan we had some canned milk up there in the Clare, Michigan, market.

Q And your managerial responsibilities included both supervision with respect to the sales

contracts and payment programs with producers?
A Yes. I mean we had to make sure the milk was paid, and, you know, there was a couple times when we weren't and then that -- because I was the lawyer, that was my responsibility to start making the calls and try to make sure we got paid for the milk, and then, you know, I participated in some hearings. I think Pennsylvania came out with their bonding program in the early '80s. Somewhere in there we had a plant in western Pennsylvania that was kind of slow on paying and we worked with them, you know, those types of things.
Q In terms of the payroll responsibilities, producer payroll responsibilities, is it fair to say that that included being responsible for accounting for the milk sold and the proceeds of the milk coming in and distributing it to producers?
A NFO had a -- the answer is not really, because NFO had a unique structure, and that is that the assets of the producers, which was the milk, was held in trust, and they had a National Farmers dairy custodial account, an Iowa Trust, I think it was, and the view was was once the milk was

delivered to the plant, you had an obligation to that trust, and then the trust owed it to the producers based upon agreements and otherwise, and there were employees of the trust that actually, you know, deposited the money, you know, wrote the checks, and that type of thing and did that accounting and filed the reports, but I was very much involved in that because one of the issues back then for us was maintaining producer qualification. It was a big challenge in the early days, and so when we came down to pooling, you know, I was there because we'd find out that we didn't get a -- producer touch base enough or whatever.

Q So your managerial responsibilities were on the marketing and sales side?

A It was on the marketing and the sales and producer relationships and the Federal Order and that type of stuff, yes.

MR. BESHORE: Thank you.

JUDGE PALMER: Any other questions? All right.

And I presume you wish to make a motion again?

MR. ROSENBAUM: I would renew my motion,

Your Honor. It's perfectly clear that his last experience, outside of being legal counsel, as far as I'm concerned, was January 1, 1987, 20 years ago. He may do some consulting work that he views as being non-legal in nature, yet he bills it as part of his law firm practice, and all the reasons that we set forth in the motion we think have been shown to apply, if anything, more fully than I knew at the time I wrote the motion.

MR. MILTNER: Your Honor, we would continue to object to the motion, obviously, and as I said, an expert designation, to the extent it has any applicability in the hearing, is not necessary for someone to testify. Mr. Yale should be allowed to testify. He has relevant knowledge. The Secretary can afford his testimony whatever weight he chooses.

JUDGE PALMER: Well, I'm not going to call him an expert as such, although he does have expertise in providing figures, but since his statement covers a number of different areas, I'm just not going to say it, but I'm going to allow him to testify and we'll let the -- you know, as I say, at the time you're writing an

opinion of -- the Secretary writes an opinion and they ascribe it to testimony given by Mr. Yale, I think that it would need to make statements as to why they felt that was sufficient testimony for whatever decision. We'll leave it there. Go ahead now.

We have a written statement?

MR. MILTNER: We do. I want to mark I think three exhibits right now, Your Honor. They're all in the back of the room, copies have been distributed to Your Honor and to the Department, I believe to the court reporter as well.

The first is a 50-page typewritten statement printed double sided.

JUDGE PALMER: That will be 32. This is Mr. Yale's statement?

MR. MILTNER: That is.

(Thereupon, Exhibit No. 32 was marked for purposes of identification.)

MR. MILTNER: Then there is a comb-bound volume containing roughly 275 pages, got a nice shiny, plastic cover.

JUDGE PALMER: What's that?

MR. MILTNER: These are the exhibits that

Mr. Yale references in his testimony.

JUDGE PALMER: Oh, all right. That wasn't sent to me, was it? Did I get all the exhibits?

MR. MILTNER: No.

JUDGE PALMER: Okay. I knew my machine ran out of paper, but I didn't think --

MR. ROSENBAUM: Your Honor, today is the first time we've seen any of these exhibits, which is its own problem.

JUDGE PALMER: You've seen 32 but you haven't seen what's now going to be marked as 33?

MR. ROSENBAUM: That's correct, Your Honor.

(Thereupon, Exhibit No. 33 was marked for purposes of identification.)

MR. MILTNER: And then, finally, Your Honor, there is a two-page spreadsheet that -- the first page has four sections entitled "Inputs, Milk Separation, Ultrafiltration and Vat Contents." It looks like this. There are copies in the back of the room. And that is referenced as a separate exhibit in Mr. Yale's testimony. I assume we'd mark that 34 unless --

JUDGE PALMER: 34, yes.

(Thereupon, Exhibit No. 34 was marked for purposes of identification.)

MR. MILTNER: Okay. Your Honor, that's all we have.

JUDGE PALMER: Has everybody got those numbers? 32 is Mr. Yale's statement. 33 is the very large document. And 34 is the two-page spreadsheet.

Now, have you got -- did you give a full set to the court reporter so that she can follow along? You've got everything. How about a full set for me.

MR. YALE: I'm sorry, we have -- I gave an extra one to Jack.

MR. ROWER: We have it here.

JUDGE PALMER: I just want to stay with everybody.

MR. ROWER: Sorry about that.

JUDGE PALMER: Fine, thank you. Why don't you proceed.

TESTIMONY OF BENJAMIN F. YALE

MR. YALE: Introduction.

I am testifying today as the general counsel and regulatory affairs consultant for Dairy Producers of New Mexico, a voluntary trade

association of dairy farmers in New Mexico and West Texas. I'm also testifying in the same capacity for Select Milk Producers, Inc., a Capper-Volstead milk marketing cooperative with members in New Mexico, Kansas and Texas; and Continental Dairy Products, Inc., a Capper-Volstead milk marketing cooperative with members in Ohio, Michigan and Indiana. Our testimony is also endorsed by Lone Star Milk Producers, Inc., a Capper-Volstead milk marketing cooperative with members in Arkansas, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Texas, New Mexico, and Tennessee, and --

JUDGE PALMER: Let me stop you for a moment. To the extent there's a variance between your testimony in printed text that we have as Exhibit 32, which would you wish to control?

MR. YALE: I think we'd need to go with written, although unless I make some editorial comments along the way.

JUDGE PALMER: All right. So that'll be the instruction to the reporter. We're going to go with the written one unless he makes it clear

that this is an editorial variation. Maybe that'll help a little bit. He does speak quickly, as they all do.

MR. YALE: Okay. Back again, talking about Zia Milk Producers, Inc., a Capper-Volstead milk marketing cooperative with members in New Mexico, and I believe they also have members in Texas.

JUDGE PALMER: Let me ask this. Has everybody read the statement? Is there anybody here who hasn't? Off the record for a second. Well, let's leave it on the record.

Is there anybody here who has not read the statement that was distributed?

MR. MILTNER: Your Honor, I understand that the copy that was sent out by e-mail last week, there are some changes.

JUDGE PALMER: There are some changes?

MR. MILTNER: Yes, Your Honor.

JUDGE PALMER: I was wondering if we could perhaps move on and say well, we've all read it, just get into Cross, but there are changes?

MR. MILTNER: Yes.

JUDGE PALMER: You can point out the changes, I suppose.

MR. YALE: I don't have a redlined --

JUDGE PALMER: Would everybody like to hear it read? Do you want to go to the changes?

MR. YALE: I wouldn't know where -- I can only tell -- I can tell you two areas where there are big changes, but the rest of it were just as we went along and there were some numbers that were --

JUDGE PALMER: Keep reading. I had a bad idea. Go ahead.

MR. YALE: Well, it was a good idea, just that I didn't make it work.

Collectively, the marketing cooperatives market approximately eight billion pounds of milk per year, virtually all of it within the Federal Milk Marketing Areas - including the Mideast, Southwest, Southeast, Florida, Appalachian, Central, and Upper Midwest. They have, from time to time, also marketed milk into the Arizona order.

We are grateful to the Department for noticing our proposals and providing this opportunity to explain why they should be adopted. Each of these organizations support the system of Federal Milk Marketing Orders and

have worked for years to make them more responsive to the needs of producers. In particular, they believe that the hearing process is essential to the continued success of the program.

The Scope of this Testimony.

The Department has noticed six proposals of Dairy Producers of New Mexico. Proposals 6, 7 and 8 each deal with the factors in the pricing formulas affected by shrink factors, butterfat recovery, and product yields. While listed as three discrete proposals, our position is that each proposal is part of a whole. That is not to say that the Department could not, for example, correct the arithmetic error in the calculation of the butterfat shrink without addressing an issue of butterfat recovery. But we view the proposals as a singular effort to amend the yield portions of the pricing formulas to more accurately and fairly establish minimum prices for producers. Accordingly, my testimony will first address Proposals 6, 7 and 8. I will also provide testimony concerning our Proposal 3 which addresses make allowances. As indicated at the first hearing in Strongsville, our

Proposal 4, which proposed the establishment of a separate Class III butterfat price, has been withdrawn.

Finally, another witness, Mary Ledman, will testify about our Proposal 15 dealing with the use of prices as reported on the Chicago Mercantile Exchange, CME, as a replacement for the NASS survey of dairy products currently used to compute minimum component prices.

Summary of positions.

This testimony will support the need to make changes as follows:

For the butter to butterfat component formula, change the yield from 1.20 to 1.22 and the make allowance from 12.02 cents to 11.50 cents. 7 CFR 1000.50(1).

2 -- I believe that's an L and not a 1.

2. For the cheese to protein formula, change the make allowance for cheese from 16.92 cents per pound to 16.38 cents per pound, the protein yield from 1.383 to 1.405, the butterfat yield from 15 -- or 1.572 to 1.652, and the butterfat to true protein ratio from 1.17 to 1.214. 7 CFR 1000.50(n)(2),(3)(i),(3)(iii).

3. For the nonfat dry milk to solids not

fat formula, change the make allowance from 15.7 cents to 14.10 cents per pound.

7 CFR 1000.50(n).

4. For the dry whey to other solids formula, change the make allowance from 19.56 cents to 15.9 cents. 7 CFR 1000.50(o).

JUDGE PALMER: We might be able to speed it up a little bit. Instead of giving the parens, just say 7 CFR 1000.50, pause, zero, okay.

MR. YALE: Okay.

Supporting documents.

In support of this testimony, I'll rely upon a number of documents. Unless made a part of this hearing earlier, the documents I will rely upon have been bound into a single exhibit, No. 33. Within Exhibit 33, individual documents are identified by the capital letters A through FFFF. Throughout this testimony I will only reference them by a document letter. A list of each of these lettered documents appears at the beginning of the exhibit package, along with the source of the document. More information on the source, meaning, and relevance of each document will be provided at the time it is referenced in the testimony.

The need for upward price adjustments in commodity to component prices.

Since the demise of the Minnesota-Wisconsin Price Series, M-W, and the Basic Formula Price, BFP, producer input into prices they receive under the Federal Milk Marketing Orders has virtually disappeared. Then, the competitive situation in the Upper Midwest required cheese plants and other milk buyers to respond to on-the-farm economics of milk producing or risk losing their milk supply. Plants paid higher prices when feed costs were high, and passed those costs on to their customers and on to the consuming public. It was not a perfect system, but it did an excellent job of discovering the competitive value of milk in the marketplace, and the FMMO system guaranteed producers received that value. That is no longer the case today.

We now have a system wherein the determinative factor is the cost to make cheese and other dairy products, not how much it costs to produce milk, or even if producers receive sufficient money to cover their costs. Even the data on the costs to produce products is

woefully incomplete.

The result has been a financial catastrophe to dairy farmers. Regardless of size, location, breed or geography, dairy farmers have been losing money, and doing so at record rates. As Gary Genske pointed out in his testimony, even the larger, more efficient herds are losing money. Ken Bailey showed that there is an ever-shrinking gross margin to producers, exposing them to continued loss of equity.

Several USDA publications have been noticed, including Mailbox Prices in the FMMO reported by AMS and the Cost of Production data reported by ERS. The Document A is a table that was prepared by me and shows three selected states where the values have been compared and cost of production exceeds income.

In that document, for New Mexico I used the Texas costs, although discussions with my clients in both states suggests that the feed costs are higher in New Mexico, particularly in the Roswell area.

The Agricultural & Food Policy Center at Texas A&M publishes an analysis which observes several "panel farms" of varying size, location,

and product.

"The chief purpose of this analysis is to project those farms' economic viability by region and commodity for 2007 through 2012."

The 2007 Baseline Working Paper shows that dairy farms face serious economic risks. Document B contains the dairy portion of that report. The full report can be found at www.afpc.tamu.edu. Under the "Recent Publications" option, select "2007 Baseline Working Paper."

Figure 5 of that report graphically shows the distribution of poor, marginal and good financial condition of the representative dairies. A comparison of the January 2006 to January 2007 reports shows an increase in the number of farms in poor condition from six to ten, with four in marginal conditions in both reports. As a result, beginning in 2007, 14 of the 23 panel dairies are in marginal to poor condition. The dairy portion of the January 2006 report is found at Document C.

A combination of several factors combine to put a financial stranglehold on producers. The first is the rapid rise in grain prices in

response to the growing demand for ethanol production.

Second, significant increases in fuel costs have had the effect of increasing the cost of feeds through increased transportation and decreases in mailbox prices through increased hauling costs.

Third, the rise in corn prices has also reduced the value of bull calves to near zero. General inflation has also reduced farm income.

For example, in New Mexico, producer prices are about $2 a hundredweight under what is needed for positive cash flow. A typical 2,000 cow dairy in New Mexico produces 140,000 pounds of milk per day. A $2 per hundredweight, shortfall amounts to a daily loss of $2,800 and an annual loss in excess of one million dollars. At an average investment of $3,000 per cow, that is a reduction of 16 percent of the total capital and debt. No farm can sustain such losses in the long term.

Current milk pricing is inadequate to meet even the cash expenses of most dairies. Unless it is resolved quickly, there will be a significant reduction in the milking herd and

the supply of milk. I do not believe the phrase "disorderly marketing" means anything, but I do believe that a government policy that forces farms to transfer their equity to plants and customers by supplying their milk at below cost destabilizes the market.

Explanation of the commodity to component prices and their use.

Current Federal Order pricing calculates four class prices from four component prices derived from four commodities. Document D is a printout of the formulas used since 2000 and each year thereafter as reported at the USDA. These were downloaded from the AMS Dairy Program's Web site at www.ams.usda.gov, and you can go to the particular page from there.

The critical part of these formulas for this hearing is found under Class III where the formulas for the Protein Price and Other Solids Price and Butterfat Price are stated, and Class IV where the Solids Not Fat Price formula is stated.

Each of these component formulas is stated as the product price less the make allowance with the result multiplied by a yield. For

protein, an adjustment is made to accommodate the use of Class IV butterfat price for Class III. The product prices are the result of surveys by NASS.

I have relied almost entirely on 2006 data because it is the most current 12-month period for which we have complete data. Further, both the Cornell and California cost studies are applicable to that year. Document E lists the NASS prices for 2006 as used in the pricing formulas. The table was downloaded from the AMS Dairy Program's site at www.ams.usda.gov, and, again, you can find the page from there. It is Table 30 of the FMMO annual statistics. I will use the simple annual average of the "final" prices - butter at 1.2193, nonfat dry milk at 0.8874, cheese at 1.2470, and dry whey at 0.3285.

Document F is Table 31 of the Annual Statistics - Federal Milk Order Class I and Class II Advanced Prices and Pricing Factors, 2006.

Document G is Table 32 of the Annual Statistics - Federal Milk Order Class II, Class III and Class IV Milk and Component Prices,

2006. These are official reports of USDA as found at the AMS Dairy Web site cited earlier. Note that by applying the formulas found in D on the average of the commodity prices in Document E will not necessarily yield the same numbers as the class and component prices in Documents F and G.

Document H, Table 33 - Federal Milk Order Principal Pricing Points, with Class I Differentials, Document I, Table 34 - Class I Skim Milk Price by federal Milk Order Marketing Area, 2006, Document J, Table 35 - Class I Butterfat Price by Federal Milk Order Marketing Area, 2006, and Document K, Table 36 - Class I Milk Price by Federal Milk Marketing -- Federal Milk Order Marketing Area, 2006, represent the use of the Document D formulas for 2006 in setting the Class I prices in each of these orders. These are also official reports of the USDA as found at the AMS Dairy Web site.

Document L, Table 5 - Number of Producers Delivering Milk to Handlers Regulated Under Federal Orders, by Marketing Area, 2006, Document M, Table 6 - Receipts of Producer Milk by Handlers Regulated Under Federal Orders, by

Marketing Area, 2006, and Document N, Table 7 - Average Daily Delivery of Milk Per Producer to Handlers Regulated Under Federal Orders, by Marketing Area, 2006, are official reports of USDA as found at the AMS Dairy Web site. These will be used to provide producer data that will be used to show how price changes impact producers.

In estimating the impact of changes, the total receipts for producers for the year (Document N) were divided by the number of producers in December (Document L). I chose to use the December number of 51,355 rather than the simple average as it more closely represents the numbers today. The simple average of production producer -- per producer per year will be multiplied times changes to the blend prices estimated for various changes. The impact on producers who are outside of the FMMO system is not estimated. USDA has repeatedly, and correctly, asserted that the changes to pricing in the FMMO system has an impact on all milk sold in the nation. We have not sought to estimate that impact.

Document O, Table 8 - Butterfat Test of

Producer Milk, by Federal Milk Order Marketing Area, 2006, Document P, Table 9 - Nonfat Solids Test of Producer Milk, by Federal Milk Order Marketing Area, 2006, Document Q, Table 10 - Protein (True) Test of Producer Milk, by Federal Milk Order Marketing Area, 2006, and Document R, Table 11 - Other Solids Test of Producer Milk, by Federal Milk Order Marketing Area, 2006, are also official reports of USDA as found at the AMS Dairy Web site. These will be used to illustrate the per class computations discussed later.

Document S, Table 13 - Utilization of Producer Milk in Class I Products, by Federal Milk Order Marketing Area, 2006, Document T, Table 14 - Class I Utilization Percentage of Producer Milk, by Federal Milk Order Marketing Area, 2006, Document U, Table 15 - Butterfat Test of Producer Milk Used in Class I Products, in the FMMO Area, 2006, and Document V, Table 16 - Nonfat Solids Test of Producer Milk Used in Class I Products, by Federal Milk Order Marketing Area, 2006, are official reports of USDA as found at the AMS Dairy Web site. The numbers in those tables, particularly the annual

average, are used to compute the impact on Class I values at test.

Document W, Table 17 - Utilization of Producer Milk in Class II Products, by Federal Milk Order Marketing Area, 2006, Document X, Table 18 - Class II Utilization Percentage of Producer Milk, by Federal Milk Order Marketing Area, 2006, Document Y, Table 19 - Butterfat Test of Producer Milk Used in Class II Products, by Federal Milk Order Marketing Area, 2006, and Document Z, Table 20 - Nonfat Solids Test of Producer Milk Used in Class II Products, by Federal Milk Marketing Order Area, 2006, are official reports of USDA as found at the AMS Dairy Web site. The numbers in those tables, particularly the annual averages, are used to compute the impact on Class II values at test.

The Document AA, Table 21 - Utilization of Producer Milk in Class III Products, by Federal Milk Order Marketing Area, 2006, Document BB, Table 22 - Class III Utilization Percentage of Producer Milk, by Federal Milk Order Marketing Area, 2006, Document CC, Table 23 - Butterfat Test of Producer Milk Used in Class III Products, by Federal Milk Order Marketing Area,

2006, Document DD, Table 24 - Protein (True) Test of Producer Milk Used in Class III Products, by Federal Milk Order Marketing Area, 2006, Document EE, Table 25 - Other Solids Tests of Producer Milk Used in Class III Products, by Federal Milk Order Marketing Area, 2006, are official reports of USDA as found at the AMS Dairy Web site. The numbers in those tables, particularly the annual averages, are used to compute the impact on Class III values at test.

Document FF, Table 26 - Utilization of Producer Milk in Class IV Products, by Federal Milk Order Marketing Area, 2006, Document GG, Table 27 - Class IV Utilization Percentage of Producer Milk, by Federal Milk Order Marketing Area, 2006, Document HH, Table 28 - Butterfat Test of Producer Milk Used in Class IV Products, by FMMO Marketing Area, 2006, and Document II, Table 29 - Nonfat Solids Test of Producer Milk Used in Class IV Products, by Federal Milk Order Marketing Area, 2006, are official reports of USDA as found at the AMS Dairy Web site. The numbers in those tables, particularly the annual averages, are used to compute the impact on Class IV values at test.

Document JJ was prepared by me and summarizes the assumptions that will be used to estimate the impact of changes to various parts of the component formulas. The average monthly NASS prices for each of the commodities for 2006 from Document E are listed. The standard butterfat, true protein, other solids and solids not fat are derived from the formulas in Document D. The averages for butterfat, true protein, other solids and solids not fat that are actual tests for the various classes and weighted were taken from Documents O, P, Q and R. The total pounds of milk per class were taken from Documents S, W, AA and FF. Utilization by class is the average annual classification as found in Documents T, X, BB and GG.

The number of producers was taken from Document L, the total receipts from Document M, and the average annual deliveries is a function of the total receipts divided by the number of producers in Document L, and as I indicated earlier, from December.

Document KK was prepared by me and utilizes these assumptions to compare the financial

impact of the changes adopted by USDA since it issued its Tentative Final Decision on the pricing formulas in December 2000. Document KK demonstrates that the blend price has been reduced by 56 cents per hundredweight over that period as a result of incremental changes to the pricing formulas.

Because the format of Document KK is used elsewhere in this testimony, it's important to take time to explain it in detail. The primary purpose of the format is to compare one set of formulas to another and determine what the changes are to the component prices, the class prices, the class prices at test and the blend prices.

The methodology is straightforward. There are four commodity to component computations: Butter to butterfat, cheese to protein, nonfat dry milk to solids not fat, and dry whey to other solids. These computations are labeled across the top of the spreadsheet. Each computation is divided into two columns. The column on the left under each formula represents the current values as listed in Document D, and I might add as labeled Current. The column on

the right represents the changed values, and that is marked As Changed. Generally, each component is computed separately from the other components, with the exception of the butterfat price which is used in cheese to protein computations. The component prices combine in the class and blend prices computed later.

Each of the factors and values of the formulas are listed along the left side. The first of these is the product price. The product prices for these comparisons, except those in which the change in the product price is the issue, are the average NASS commodity prices for 2006 as found at Document E. The product price for butter is $1.2193. The make allowance is the value assigned as the cost per pound of the product such as .1202 per pound for butter. The net per pound is the product price less the make allowance. This difference is multiplied by the product yield to arrive at the component prices found at the bottom of the table with the exception of the cheese to protein formula. In the case of the cheese to protein formula, the product yield of 1.383 in the spreadsheet is the yield for protein only

and is part of other calculations used to derive the protein price.

At the next to last row on this spreadsheet, the component prices are shown. For the butterfat, solids not fat, and other solids, the component prices are the product yield times the net per pound. To determine the protein price, a more detailed analysis is required. Rows 5, 6 and 7 simply repeat the information set out in rows 1, 2 and 3. Row 8 (cheese from butter yield) represents the Van Slyke cheese yield formula. This number, 1.572 in the current formula, implies a butterfat recovery of 89.40 percent, the number necessary to obtain 1.572 by using the Van Slyke formula. The result is the Class III butterfat value per pound. Since the FMMO uses the same basic butterfat price for all classes, it is necessary to make adjustments to the protein price. The details of this adjustment are explained in more detail when I will discuss alternative values for some of the factors in this part of the formula.

The butterfat price is the component price for butter to butterfat. Note it takes the

values calculated in the "Butter to Butterfat" conversion. In the first column of the "Cheese to Protein" conversion, which is the current formula, the value of 1.3189 is input. In the "As Changed" column, the value of 1.3467 is input, which represents the as changed value in the "Butter to Butterfat" conversion. Those numbers are then multiplied by the factor of .9, which represents the ostensible 90 percent butterfat recovery in the formula. The "Fractional Pound of Butter" row represents the equivalent value of Class IV butterfat as used in the protein formula. This fractional pound is subtracted from the butterfat price for the difference between the Class IV and Class III price.

The next factor, Fat to True Protein Ratio, is 1.7 in the Current column. What it means and how it should be changed is described elsewhere. For the moment, the factor is multiplied times the Class IV to Class III butterfat for the adjustment to protein, .5953 in this case. It is added to the protein before adjustment. The latter is the product of the earlier net per pound times the product yield. The sum of the

protein before adjustment and the adjustment to the protein is the component price.

The As Changed column is computed identically as the Current column except where the values are stated in bold and italics. For example, in this worksheet, the butterfat make allowance in the As Changed is stated as 0.1150, which signals differences from the Current column for that value.

In Document KK, the values in the As Changed column represent those values found in the Tentative Final Decision published in December of 2000, effective from January 2001 through March of 2003. The values in bold and italics identify those changes.

And let me add that the values that I use in that, although it is for that period, I actually did use the average test values from 2006 as indicated earlier and as is in the assumption Table JJ.

The second table in Document KK compares the class prices at standard test, 3.5 percent butterfat, 2.9915 percent true protein, and 5.8 percent other solids, based upon the computed component prices. The top row

represents prices based on current formulas. The second row represents prices using the changed values. The last row is the difference per hundredweight.

Since milk is never sold at standard test, the third table is necessary. Using the data from the Annual Statistics as summarized in Document JJ, the class prices at average test throughout the FMMOs are computed. The formula for the class prices at test are as follows:

Class I Price at Test equals 1 minus Class I butterfat percent times Class III skim. That product plus Class I butterfat percent times the butterfat price times 100.

The formula for Class II at test is:

Class II Price at Test equals 1 minus Class II butterfat percent times 9 times the solids not fat price plus .07 cents. That product then is added to the Class II butterfat price -- or Class II butterfat percentage times the Class II butterfat price increased by .007, and that times 100.

Class III Price at Test equals 1 minus the Class III butterfat price times the product of the percent of protein times 100 times the

protein price plus the other solids percent times 100 times the other solids price plus the Class III butterfat percent times the butterfat price times 100.

Class IV Price at Test equals 1 minus Class IV butterfat percent times solids not fat percent times 100 times solids not fat price plus Class IV butterfat percent times the butterfat price times 100.

In addition, a blend price is computed by weighing the prices at test using the class usage for 2006. It is computed by dividing the total pounds marketed by the pool values in the next table. This is not intended to create a statistical blend such as we see in each month's milk marketing orders' reports. It is, instead, to establish a baseline (the current formulas) and provide a method to approximate component, class price, and blend impact as the result of the changes. For that reason, as well as simplicity, this blend price does not include any adjustments for location values of Class I prices, payments into and out of the reserve, market administrators' fees and other parts of determining an official final blend price

computation for producer payment or statistical purposes.

The last table computes the blend values at test and class prices computed above. The pool is the sum of the class values without adjustment for location or other non-class price issues.

What the spreadsheet tells us, then, is the expected change in component prices, class prices at standard test, class prices at actual test, and pool values at test and blend prices and the difference between each of those between current formulas and the changes being discussed. In this example, the spreadsheet tells us that the 2000 Tentative Final Decision formulas had butterfat at 2.83 higher, protein at 7.19, solids not fat at 2.43 higher, and other solids at 5.73. Class I and Class III were 64 cents higher, and Class II and IV were 31 cents higher at test. At test Class I increased -- or that should be at Class III. At test Class I increased 60 cents; Class II increased at 42 cents; Class III increased at 63 cents; and Class IV at 35 cents. Producer blend prices have been reduced an average of 56 cents

per hundredweight. The final number on the page, 13,245, estimates the annual reduction per the average producer shipping into the Federal Marketing Order system.

Each time that we analyze a proposed change in the pricing formula, we have prepared and included a document identical in form to Document KK. And this way, each individual proposed change can be assessed in terms of its total financial impact on producer income and compared with other changes.

Error in Butterfat Price Formula.

Proposal 6 proposes an increase in the yield factor for butterfat to butter from 1.20 to 1.211. The purpose of this change is to correct for a mathematical error in the Department's calculation of "shrinkage." In the Final Decision establishing the Class III and IV pricing formulas from November 2002, the Department made substantial reductions from the yields in the Recommended Decision of October 2001 by including, for the first time, adjustments for "shrinkage." Because these changes were included in the Final Decision but not in the Recommended Decision, interested

parties were not provided an opportunity to respond to the changes.

Assuming for the moment that shrinkage should be accounted for in the formula, the assumed shrinkage was improperly calculated. The purpose of Proposal 6 is to correct this improper calculation. The 2002 Final Decision described the incorporation of shrinkage as follows:

The loss allowance for butterfat will be reflected by adjusting the 0.82 divisor in the butterfat price formula. Testimony and comments indicate that farm-to-plant losses on all milk solids is 0.25 percent, or (0.0025), with butterfat incurring an additional loss of 0.015 pounds per hundred pounds of milk.

The butterfat price formula is determined as follows --

JUDGE PALMER: Let me interrupt you for a second. I don't think we need a break, but I'm wondering whether you do, and I'm going to leave it up to you. Whenever you feel like you want a break, just raise your hand.

MR. YALE: Let's maybe get through the end of this section, so we'll keep going.

JUDGE PALMER: Okay.

MR. YALE: For every pound of butterfat, 0.0025 pounds is lost in the farm-to-plant transfer, and then in parentheses it does the formula 1 minus .0025 equals .9975.

The next point is in addition, for every pound of butterfat, and we put "sic, should be for every hundredweight of milk (See 67 Fed. Reg. 67917)," there is an additional 01 -- .0150 farm-to-plant loss on butterfat solids, and in parentheses it does (.9975 minus .0150 equals .9825 pounds of butterfat).

Dividing .9825 by 0.82 results in a butterfat factor of 1.20 (0.9825 divided by 0.82 equals 1.20).

Therefore, the Class III and IV butterfat value per pound is computed as follows, and this is in parentheses: (NASS butter price minus 0.115), and that difference is multiplied by 1.20, and the citation is 67 Fed. Reg. 67920 (November 7, 2002).

The error is further explained by the following: Assuming that overall milk volume at the farm is reduced by .25 percent in transportation and fat is further reduced by

.015 pounds per 100 pounds of milk received at the plant, the milk at the plant is the farm volume adjusted for shrink in accordance with this formula: 3.5 times .9975 minus 0.015 equals 3.47625. That is, if the farm test indicated 3.5 pounds of butterfat per hundredweight, that amount is first reduced by the 25 percent for the farm-to-plant loss. The result is then further reduced by a loss of .015 pounds of butterfat solids.

And that is -- I want to insert in there, and that is the rate on a hundred pounds of milk.

The yield from this reduced volume is divided by the farm weight to obtain the yield from farm weight to product. The Final Decision instead increases the farm-to-plant shrink factor by a full 1.5 percent. The formula used by the Department, therefore, is 3.5 times the difference of .9975 minus 01 -- .015, or carried out 3.5 times 0.9825 equals 3.43875. The difference is that the Department assumes that the plant utilizes .0375 pounds of butterfat less than it should, and that's 3.47625 plus 3.43875. A comparison of the correct formula

with the Department's formula demonstrates the Department has incorrectly placed the second set of parentheses in its formula.

The correct formula is, and I will use parentheses because it's important, ((3.5 times 0.9975) minus 0.015) equals 3.47625.

The Department computation is (3.5 times (0.9975 minus 0.015)) equals 3.43875.

The Department implicitly acknowledged its error in the 2002 Final Decision. In the manufacturing price formulas, the butterfat shrinkage is used in two places. First, it is used in calculating the butterfat price. Second, it is used in calculating the butter-cheese yield in the protein formula.

In the butter-cheese yield in the protein formula, the Department correctly calculated the butterfat shrink in the butter-cheese yield by first incorporating farm-to-plant shrink and then incorporating the additional 0.015 pound reduction per hundredweight.

The Van Slyke formula for the cheese yield of 3.5 pounds of butterfat in a standardized 100 pounds of milk is 0.90 times 3.5 times 1.09, and that product is then divided by 62, which equals

5.538. To calculate the yield of one pound of butterfat, the result is divided by 3.5, or 5.538 divided by 3.5 equals 1.582. This is the source of the 1.582 factor which was used in the formulas in the Department's decision beginning in January 2000 through the Final Decision in 2002.

Applying the shrink for butterfat, the formula was modified as follows: .90 times 3.5 times .9975, and that product subtracted -- I'm sorry, I need to restate that. It needs to be under parens. (0.90 times ((3.5 times 0.9975) minus 0.015) times 1.09) divided by 0.62 equals 5.5003. Since we want to know the yield of one pound of butterfat on the farm, we divide 5.5003 by 3.5 for a yield of 1.572. That is the new yield in the protein formula in the Final Decision.

Here the Department correctly placed the second set of parentheses in the formula. In the butterfat formula, it is done incorrectly.

The Department's butterfat formula is (3.5 times (.9975 minus 0.015)) equals 3.43875, but the Department's protein formula is (0.90 times ((3.5 times .9975) minus 0.015) times 1.09)

divided by 62 equals 5.5003.

Correctly calculating the butterfat yield would result in the following: 3.5 times .9975, and that product -- from that product subtract 0.015 equals 3.47625.

3.47625 divided by 3.5 equals .9932.

Dividing .9932 by .82 (the yield of butterfat from one pound of butter) equals 1.211. By placing the parentheses in the wrong place, USDA incorrectly computed the formula as follows: 3.5 times .9875 or 3.43875. And that 3.483 -- that 3.43875 divided by 3.5 equals .9825, and .9825 divided by .82 equals 1.98. The resulting factor is 1.2. For butter at $1.05 per pound, the increase in the producer price is .0413 cents per hundredweight on 3.5 milk.

In addition to incorrectly calculating the butterfat yield, the 2002 Final Decision failed to correct the cheese to protein component price formula. The current formula calculates the protein price as a residual difference between the Class III price and the Class IV butterfat price.

In the Tentative Final Decision on Class

III and IV prices, published by the Department on December 7, 2000, and in subsequent decisions, the Department agreed that the amount of Class IV butterfat that was to be subtracted from the value of butter and cheese to calculate the protein price was to be factored by the butterfat recovery.

The formula developed by the -- adopted by the Department in the 2000 Tentative Final Decision utilized an implied butterfat recovery of 90 percent. Thus, to determine the value of Class IV butterfat, the Department properly multiplied the Class IV butterfat price by .9 in the formula. In the process of reducing the yield to account for farm-to-plant shrink, the result was a butterfat yield of 1.572, which is equivalent to a butterfat recovery of 89.4 percent. In the protein formula, the corresponding factor should be used. The point -- the 0.90 in the protein formula should be replaced with .894 to be consistent with the calculation of the Class IV butterfat price.

Accordingly, we are amending our Proposal 6 to correct for both the change in the butterfat yield and the calculation of the protein.

In Document LL, a document prepared by me using the same format as used in KK, Comparison of Impact on Blend by Correcting the Errors in Applying Shrink to Butter to Butterfat and Adjustment for Class IV Butterfat in Protein Price to Current Formula, the impact of the error in the shrink computation is shown. The estimated impact is seven cents per hundredweight and an average loss to dairy producers each year of 1,683.

The farm-to-plant shrink should be removed. Incorporating so-called "farm-to-plant losses" into the plant yield factors should be discontinued. In the 2002 Final Decision setting the current yields, the USDA stated, "Butterfat Price."

Your Honor, I think this would be a good place for a break. I think that's what I had said before.

JUDGE PALMER: All right. Let's break here. We'll start again with the Section VII on page 17, take a ten-minute break.

(At this time a recess was taken.)

JUDGE PALMER: Back on the record.

MR. YALE: Section VII, The Farm-to-Plant

Shrink Should Be Removed.

Incorporating so-called "farm-to-plant losses" into the plant yield factors should be discontinued. In the 2002 Final Decision setting the current yields, the USDA stated, "Butterfat Price. This Final Decision continues to use the NASS price for Grade AA butter in calculating the butterfat price to be used in Class IV, and uses the current and the Recommended Decision's make allowance of .115 cents. However, this Final Decision changes the use of a .82 divisor in the price formula to a multiplier of 1.20 in order to provide consistency to price formulas and to account for farm-to-plant milk losses." 67 Fed. Reg. at 67918.

The Federal Milk Marketing Order system and its pricing and blending program should not be used by producers, cooperatives or processors to mask inefficiencies or to obligate those who provide milk more efficiently to subsidize those who do not. Adjustments to the pricing formulas to account for farm-to-plant shrink is a carryover from a period of lesser efficiency. What was then recognized as general industry

practice now penalizes those producers whose cooperatives and buyers have taken the steps to improve the accuracy and specificity of the measurements for their milk and their components.

Traditionally a milk hauler would stop at several farms and use a dipstick to measure the amount of milk picked up at each farm or other measuring method. The process is detailed in Appendix B to the PMO, see Document MM.

In the modern day, the hauler scale weighs his rig before and after a single pickup and delivers that milk directly to the plant, where a similar scale observation is made.

While we recognize in many instances milk haulers still have several stops on their route, this is increasingly the exception and not the rule. Today, over half the milk in the country is produced on farms that can deliver a full tanker of milk. Document NN, Milk Cows: Number of Operations, Percent of Inventory and Percent of Milk Production by Size Group, United States 2005-2006, is Table 27 from "Farms, Land in Farms, and Livestock Operations 2006 Summary, released February 2, 2007," by the National

Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. It shows that 51.6 percent of the milk comes from operations that have more than 500 dairy cattle. At 65 pounds per day per cow, the lowest milk production in that group is 32,500 pounds per day - well able to fill a tanker of milk within 48 hours of harvest.

And, by the way, I might add that the 48-hour harvest is required by the PMO.

Much, probably most of the milk in the next tier, 200 to 499 head, are in a similar position because from about 350 cows on up, the producer has reached the point where a single pickup will fill a tanker. In the case of the others, depending on the proximity of the market, they could still fill smaller straight trucks. Thus, we are approaching a time where nearly two-thirds of the milk comes from farms that are or could be single farm pickups. By the time this hearing process ends, that number will be only higher.

I have conferred with the employees responsible for farm weights and tests, milk marketing reconciliation, and accounting for

some of my clients. Those employees indicate that the net of all overages and underages between farm weights and tests and plant weights and tests is a wash. In almost all instances, the difference between the farm weights and tests and the plant weights and tests is significantly less than the .25 percent assumed by the Federal Milk Marketing Order presumptions. If there is a consistent error, steps are taken to identify the source of the difference and to correct it.

The primary reason for the minimal differences in weights is that all the members of Select, Continental and Zia, and the producers with most of the milk marketed by Lone Star, ship a full tanker load of milk at each pickup. This leads to greater specificity and accuracy in the observation of the milk picked up at the farm. These cooperatives are not unique. Document N, Table 7 - Average Daily Delivery of Milk Per Producer to Handlers Regulated Under Federal Orders, by Marketing Area, 2006, shows that the average daily pickup in the Florida, Pacific Northwest, Southwest and Arizona Marketing Areas is sufficiently large

for full tanker pickups of approximately 50,000 pounds from farms within 48 hours of harvest as required by the PMO. As for the other marketing areas, there are a number of farms that also qualify for single farm pickups.

To maintain its relevance, the Federal Order System needs to recognize the changing technologies and efficiencies in milk production and marketing. We need to demand that our regulations fairly compensate producers for becoming more efficient. Maintaining a farm-to-plant shrink adjustment in the pricing formula penalizes those producers who have become more efficient and caters to those who could become more efficient, but decline to do so. The concept of farm-to-plant shrink is a remnant of the dairy industry that I began working in 30 years ago; really 34. It has no place in the modern, globally-competitive marketplace in which we now compete.

Our Proposal 7 would eliminate the farm-to-plant shrink adjustments from the pricing formulas. Adoption of Proposal 7 would signal to end a triple penalty to efficient producers.

First, elimination of farm-to-plant shrink would result in a minimum pay price premised on the reality experienced by my clients that true farm weights are equivalent to plant weights. The current formula confers an unwarranted windfall on our buyers who, essentially, pay for less milk than they receive.

Second, because our member farmers have true weights, eliminating farm-to-plant shrink from the formulas will end the subsidization of those producers whose farm weights and tests are inaccurate and erroneous.

Third, because the manufacturing formulas are the basis for Class I and II pricing formulas, those prices are reduced unnecessarily as a result of the farm-to-plant shrink adjustments.

The shrink is not "stickiness" or milk left in vessels. It results from the weighing and testing at the farm. Milk hauling is typically contracted to independent haulers hired by producers or their cooperatives. Volume losses are due to the use of "dipsticks" and the conversion of those imprecise measurements instead of using actual observed weights. The

PMO describes it this way: "Carefully insert the measuring rod, after it has been wiped dry with a single-service towel, into the tank. Repeat this procedure until two identical measurements are taken. Record measurements on the farm weight ticket." Document MM, page 4. The visual measurement of the rod provides an opportunity for interpretation. Do you read at the top or the bottom of the meniscus. A hauler who reads the meniscus of the dipstick at its highest point credits the producer with slightly more milk than picked up, while the hauler benefits by keeping his customer happy. If those who purchase the milk checked the economic incentive for this, the farm-to-plant shrink would effectively end.

Fat losses are not necessarily the result of fat sticking to pipes and tanks. Imagine if .015 pounds of butterfat per hundredweight actually stuck to the pipes. In a full tanker of 500 hundredweight, this is a full 7.5 pounds of butterfat clinging somewhere in the works. In a plant that receives even a modest 10 loads of milk per day, each year 13 tons of butterfat would be sticking to pipes and tanks somewhere,

never to be seen again. At a large, modern cheese plant where 140 loads of milk are delivered each day, this amounts to half a ton of butterfat sticking to pipes each day, a truly staggering case of clogged arteries. So high is such a number that the buyer would require, and obtain, procedures from the sellers of milk to eliminate these errors.

And I want to add, I want to make clear that we're talking about the farm-to-plant loss and not losses within the plant itself.

The most common source of these butterfat losses is inaccurate sampling and testing. The failure to fully agitate the tanks before measurement, the failure to properly take the sample, and simple errors in testing account for the bulk of the "shrink." In other words, the "shrink" being claimed will include situations where the plant tester has arrived at lower tests than the selling cooperative. Today the market administrators' offices routinely check test equipment to insure accurate tests. Even with modern testing equipment, there are still ranges and each side has the incentive to go to the end of the range in its favor.

Assuming such behavior is okay and assigning a regulatory cost to such behavior masks the problem. There is no economic incentive for the parties to solve the issue. These losses are not too small to ignore. Regulations should demand solutions rather than institutionalize inefficiency in a rule based upon decades-old analyses.

USDA said in the 2002 Final Decision, "Federal Orders have always contained provisions for 'shrinkage.' Since handlers have to account for all receipts and utilization, the shrinkage provision allows assigning a value to milk losses at the lowest priced class, providing explicit recognition that some milk loss is inevitable in farm-to-plant movement." 67 Fed. Reg. 67917, November 7, 2002.

But in the modern dairy industry, milk loss is not "inevitable" and those who are inefficient should not be rewarded by subsidies from those who have solved the problem. The marketplace has devised arrangements to contract for shrink, and reductions to the pay prices for inefficient producers should be left for the marketplace to determine.

The Department has also said in the Final Decision, "The loss allowances in the Class III and IV formulas are intended to reflect actual losses that are beyond the processing handler's ability to control. In addition, farm-to-plant losses cannot be assigned to a lower class value since the milk solids unavailable for processing effectively have no value in the Class III and IV formulas." 67 Fed. Reg. 67917, November 7, 2002.

But these losses are within the processing handler's control. A handler can refuse to accept milk from shippers that demonstrate unacceptable farm-to-plant losses. The handler can request assistance from the market administrator to check the tanks and the testing methods.

And I might add, it's not in the testimony, many states also have provisions to observe and test and verify the weights for purposes of their weighers' and measurers' licenses.

The handler can contract for milk based on farm tests without shrink and adjust their payments accordingly.

Additionally, the Department stated, "Prior

to Federal Order reform, milk pricing for all Federal Milk Marketing Orders relied on the Grade B Minnesota-Wisconsin (M-W) price series and later the Basic Formula Prices. These prices were determined by manufacturer milk plant survey reports of Grade B milk purchases free of government price regulation and represented a competitive pay price for milk. The competitive pay price factored the entire cost of processing milk purchased from farms into finished dairy products. In contrast to the competitive pay prices, Federal Order reform could no longer rely on a competitive pay price and purposefully chose NASS surveys of end-product prices and sales to establish Class III and IV prices with product price formulas. Many of the plants reporting to NASS purchase large quantities of milk from individual producer cooperatives. The end-product pricing formulas developed under reform were based in part upon the cost to process raw milk into finished dairy products." 67 Fed. Reg. at 67917, November 7, 2002.

The basic contractual relationship described in the Final Decision has not changed.

Cooperatives can still negotiate with their members and pay them on actual milk deliveries. Proprietary handlers can refuse to accept milk from producers with excessive losses.

When the Department incorporated shrink adjustments in the Final Decision, it made the following statements to explain the incorporation of the adjustments:

"The hearing testimony, as well as comments to the Recommended Decision, provide sufficient evidence to conclude that the Recommended Decision formulas do not properly consider farm-to-plant losses that occur. Testimony indicates that these losses are .25 percent on all milk solids, and that butterfat milk solid losses are an additional .015 pounds per hundredweight of milk. These losses need to be represented in the pricing formula, according to these claimants, to account for the out-of-plant losses that occur prior to processing raw milk into finished products such as cheese or butter/powder." 67 Fed. Reg. at 67917.

"An adjustment to the price formulas to account for the difference in milk components paid for various -- or paid for versus

components actually received is appropriate. Based on the hearing record and comments filed by numerous parties, the farm-to-plant adjustment will reflect a .25 percent loss of nonfat solids, including protein and other solids, and a .25 percent loss of butterfat, plus a .015 pound loss of butterfat."

MR. STEVENS: Your Honor, could we have this part just inserted in the record because he's reading from Federal Register citations. That whole page on -- you know, starting in the middle of 23 to 24 is all from the Federal Register, so if anybody has a problem with it, fine. If not, can we just insert it as read?

MR. YALE: Okay, I mean I would take that as read.

MR. STEVENS: Maybe when you come to those parts in the future, just refer to the Fed. Reg., and if anybody has a problem, then have it be on the record, but otherwise just shorten it up that way if you could, Ben.

JUDGE PALMER: Good suggestion. We'll take it.

MR. YALE: Okay. Those sections that are at the Federal Register as cited in the

Decision, and then I would also note in the following thing is that the next page where it has the cheddar cheese yield contribution and how those pounds are computed referenced at 67 Fed. Reg. at 67929, and I won't read those.

(The following was not read, but herein inserted into this record:

"An adjustment to the price formulas to account for the difference in milk components paid for versus components actually received is appropriate. Based on the hearing record and comments filed by numerous parties, the farm-to-plant adjustment will reflect a 0.25 percent loss of nonfat solids, including protein and other solids, and a 0.25 percent loss of butterfat, plus a 0.015 pound loss of butterfat. These adjustments are reasonable and are reflected in the respective yield factors used for computing the milk component prices. 67 Fed. Reg. at 67918.

"This final decision incorporates an adjustment to the respective yield coefficients of each milk component. The adjustment is based on an overall factor of 0.25 percent loss of each milk component and an additional 0.015

pounds of butterfat lost between the farm and the receiving plant. 67 Fed. Reg. at 67918.

"These loss allowances are adopted into the Class III and IV pricing formulas. The farm-to-plant losses are reflected on the end products that result from Class III and IV milk, namely, cheese, dry whey, nonfat dry milk, and butter. They are reflected in this way to ease the concerns raised by Select Milk and Continental Dairy who indicated that reflecting farm-to-plant losses on the front end of the product formulas (based on farm milk) may cause confusion. 67 Fed. Reg. at 67918.

"When farm-to-plant losses are incorporated into the Van Slyke cheese yield formula, the Van Slyke formula results in the protein price factors from which the Class III protein price is derived. 67 Fed. Reg. at 67928.

"The Van Slyke Formula Used in This Final Decision.

"Cheddar cheese pounds attributable to butterfat = ((0.9x3.5) x1.09/(1 - 0.38) = 5.5379 pounds of cheddar cheese.

"Cheddar cheese pounds lost due to the 0.015 farm-to-plant butterfat loss = ((0.9x3.5)

x1.09/(1 - 0.38) = 0.0237 pounds of cheddar cheese, 5.5379 - 0.0237 = 5.5142 of cheese after farm-to-plant loss.

"Cheddar cheese pounds lost due to the 0.25 percent solids loss on fat solids = 5.5142 pounds of cheese from butterfat x(1 - 0.0025), 5.5142 x0.9975 = 5.5004 pounds of cheese from farm butterfat.

"Cheddar cheese yield contribution per pound of fat at farm = 5.5004 pounds of cheddar/3.5 pounds of fat at farm = 1.572.

"Cheddar cheese pounds attributable to protein = ((0.8220 x2.9915) - 0.01) x1.09/(1 - 0.38) = 4.1473 pounds of cheddar cheese.

"Cheddar cheese pounds lost due to the 0.25 percent solids loss on protein solids = 4.1473 pounds of cheese from protein x(1 - 0.0025) for farm-to-plant loss = 4.1473 x 0.9975 = 4.1369 pounds of cheese from farm protein pounds of cheddar/2.9915 pounds of protein at farm = 1.383.

"Cheddar cheese pounds from standard farm milk = 5.5004 pounds of cheese from standard farm butterfat +4.1369 pounds of cheese from standard farm protein 9.6615 total pounds of

cheese from standard farm milk.

"The butterfat-to-protein ratio factor in this final decision is 1.17 and is derived by dividing the farm butterfat by the farm protein (i.e. 3.5 pounds of butterfat/2.9915 pounds of protein = 1.17). 67 Fed. Reg. at 67929.

"The butterfat yield coefficient is changed from 1.582 to 1.572 to reflect the farm-to-plant butterfat losses. The remainder of the protein price formula is unchanged. 67 Fed. Reg. at 67927.

"The results of the above computations yield the following protein price formula:

"((NASS cheese price - 0.165) x1.383) + (((NASS cheese price - 0.165) x1.572)-(butterfat price x0.9)) x1.17.

"67 Fed. Reg. at 67929."

(End of insert)

MR. YALE: So I'm now in the paragraph just before the beginning of Section VIII.

And that is our Proposal 7 to remove shrink has the following impact on component prices: Butter to butterfat yield goes from 1.20 to 1.22. The cheese to protein formula also changes. Protein factor goes to 1.386 if only

the shrink is removed. Butterfat recovery goes from 89.40 percent to 90 percent and the factor to 1.582 and the solids not fat goes from .99 to .9925. Document OO was prepared by me and computes the component, class and blend prices by making those changes to the formulas. The result on average 2006 NASS prices was seven cents increase in the blend and $1,595 on the annual proceeds for an annual -- or for an average producer.

The need to change the commodity to component yields.

Public data available on dairy products and yields.

The definition of commodity products.

Before a discussion of product yields can be had, we should begin by clearly identifying the commodity products that are the basis for the pricing system. It should go without saying that if the NASS prices, or as we argue later, CME prices, provide the prices utilized in the pricing formulas, then the make allowances and the yields should be tied to the products in the price series utilized and no other products should be utilized to determine make allowances

or yields.

For protein, the proxy for cheese and the basis for determining the value of milk used in all cheeses are 40-pound block and 500-pound barrel commodity cheddar cheese prices. The use of "commodity" cheddar is significant because there are a lot of producers of cheddar style cheeses that do not produce commodity cheeses. Many of these cheddars are not sold in blocks or barrels. They come in plastic covered loafs and wheels. Some are wrapped in black wax or larded cloth. These are sold as artisan or specialty cheeses at higher prices. In the United States, cheddar cheese comes in many varieties. These include, but are not limited to mild, medium, sharp, New York style, Colby/Longhorn, white, Vermont and full fat. New York style cheddar cheese is a particularly sharp cheese, which means it's aged, I might add, sometimes with a hint of smoke. Cheddar cheese is provided for use as sliced, cubed, shredded and mixed to make spreads and other uses. The costs of plants making cheeses that are not reported cannot be considered. Their costs and practices are not reasonably comparable to commodity plants.

These extra costs are offset by higher sales prices (or should be).

Regulations specify the standard of identity for cheddar cheese. Document PP, Standard of Identity for Cheddar Cheese, 21 C.F.R. Section 133.113, and Document QQ, Standard of Identity for Cheddar Cheese Used in Manufacturing, 21 C.F.R. Section 133.114, define the product subject to the NASS cheese survey. I will refer to different parts of this regulation later, but it should be pointed out now that under Subsection (b)(1), the ingredients must be milk, nonfat milk or cream as defined by regulation. Document RR, Dairy Product Prices Cheddar Cheese, is a copy of the reporting instructions for cheddar cheese as used in the pricing formulas. It requires that the cheese meet the standards of identity for cheese, and it should be cheddar cheese.

Unique among dairy products, butter is not defined by regulation, but by statute. 21 U.S.C.A. Section 321a, see Document SS. NASS butter must meet this definition. Document TT, Dairy Product Prices Butter. NASS butter also must -- must also meet USDA Grade AA standards.

USDA Grade AA standard is reached if butter (defined by statute) scores 93 out of 100 points based upon aroma, flavor and texture. USDA Grade AA butter will be delicate and sweet in flavor, with a fine and pleasing aroma. It is made from Grade A sweet cream, smooth and creamy in texture and easily spread.

The Standard of Identity for nonfat dry milk is at Document UU, Standard of Identity for Nonfat Dry Milk, 21 C.F.R. Section 131.125. The requirements for NASS purchases are set forth in Document VV, Dairy Product Prices Nonfat Dry Milk. These include USDA Extra Grade and U.S. Public Health Grade A. USDA Extra Grade "means the laboratory tests show that it possesses a sweet and pleasing flavor, a natural color, and satisfactory solubility. USDA inspectors also check the instant milk for other quality factors such as moisture, fat, bacteria, scorched particles, and acidity." And this comes from the USDA Web site at www.ams.usda.gov/dairy and then their grade section.

I might also add that for Extra -- USDA Extra Grade that's not stated in here is that the moisture is a little bit less than what the

standard of identity would allow.

Dry whey does not have a standard of identity. Document WW, Dairy Market News Terminology, does not define dry whey, although it includes prices for whey powder and whey protein concentrate. The NASS survey form, Document XX, Dairy Products Prices Dry Whey requires that the product meet USDA Extra Grade edible nonhydrogroscopic dry whey standards. Document YY contains the definition for dry whey when used by USDA in Supplemental Specifications for Plants Manufacturing, Processing and Packaging Whey, Whey Products and Lactose.

Lack of public data on yields and other factors.

Despite the fact that end product pricing for FMMOs has been used since January 2000 and contemplated since the mid 1990s, there still has been no study on actual yields at the commodity plants. This is disappointing because the information that does exist is known by processors but not producers. This lack of available information limits producer participation in hearings such as this and hinders the ability to establish active

formulas. But the total absence of complaints by plants regarding the current yields speaks enormously in favor of the proposition that they are too low. With the limited data available to us, we will show that that is in fact the case.

There is a total lack of public data on this issue. It is not in the interest of the processors to provide this information. Higher yields will result in higher producer prices. If the current yields were too high for any processor, let alone ones of average efficiency, there would be requests to lower the yields. Since there are no such complaints, it means that the yields are below the lowest yielding plants! Otherwise, we would expect complaints from processors similar to those made regarding make allowances.

Although the adjustment of yields has a significant impact on the accuracy of the formulas, USDA has not asked for the information. RBCS provided some yield information, although it was not requested by the participating plants. After all, those requesting the RBCS study had an interest in the lower minimum prices, not raising the yields.

Likewise, the Cornell study did not seek yield information, although the make allowances surveyed have real meaning only relative to the yields of the plants. CDFA provides some yield information which can be made usable.

Changing factors in the cheese to protein formula.

Our proposal includes an adjustment to the yield of pounds of cheese from one hundredweight of milk. Our proposed change is due to three different factors. First, the current formula assumes that a plant recovers 90 percent of the butterfat when making cheese. We propose changing this recovery percentage to 94 percent to reflect modern efficiencies.

Second, the current formula assumes that casein represents 82.2 percent of the true protein in milk. But at average producer tests, the actual percentage of casein in milk is 83.25 percent. We propose changing the percentage of casein in the formula to reflect the more accurate percentage of casein.

Third, the fat to protein ratio in the cheese to protein formula used to adjust protein to compensate for the difference between Class

III and Class IV butterfat should be changed to 1.214 to reflect average producer tests.

The yield factor in the formula is an indivisible part of the formula.

The make allowances are a function of the yield. If we take the total cost of making cheese (or any other manufactured product) and divide those costs by the total pounds of product produced, a cost of production per pound of product is determined. In the minimum price formulas where we are attempting to approximate the manufacturing allowance for a plant of average efficiency, the yield of product assumed by the formula has a direct impact on the make allowance. If the costs of a plant are divided over a smaller volume of produced product, a higher make allowance results.

Under the current formulas, producers are actually "paying" for higher yields at the plant. Make allowances cover all costs associated with operating the plant, including depreciation on the equipment and systems that increase butterfat recoveries and yields. Make allowances include a return on investment for the equipment that increase yields. These costs

are reflected in the cost surveys that form the basis of the make allowances. Fairness and consistency require that the yields be considered and updated so that producers share in the benefits gained from the additional costs passed back to them.

Looking at only make allowances and ignoring the product pricing and the yields results in an incomplete picture. The end product pricing formulas are proxies for what the milk is worth. The concept is to determine what a plant must keep to pay costs and be profitable and what is left is what can be paid for milk. To determine that product price, one needs to know how much milk will be received, how much product comes from that milk (or yield), and how much the product is sold for (or product price). Any business that ignored how efficient it was would not long survive.

Make allowances without direct linkage to the product being made and the yields are meaningless. The make allowances also reflect the type of vats purchased, their butterfat recovery, whether they are designed to capture whey and separate and return the butter to the

vat, ultrafiltration that increases recovery both of fat and the amount of casein to make cheese. The yields represent the plant management and its ability to produce sufficient cheese from a quantity of milk at a price.

The use of the Van Slyke formula.

USDA has used the Van Slyke formula as the basis for computing Class III prices. I prepared Document ZZ which sets forth the Van Slyke formula. The formulas solve for the amount of cheese from milk as well as for only protein and butterfat yields. The formulas are as follows:

Pounds of cheese equals the butterfat percentage -- or recovery percentage times the butterfat pounds. That product is added to the percentage of casein times the protein pounds. That product is -- you subtract .01 and then you add those two and take that times .109 and divide that by 1 minus the moisture content.

Pounds of cheese from butterfat equals butterfat recovery percent times butterfat pounds times .109 and that is divided by the dry matter or one minus the moisture percentage.

The pounds of cheese from protein equals

the percent of casein times the protein pounds minus .01, that taken times 1.09, and that is divided by 1 minus the moisture percentage.

The parts of the formula at issue are the percent of casein in protein and the butterfat recovery rate. The fat to protein ratio is a creature of the Class III protein component pricing.

Each of these three have impacts on the pricing. I prepared Document AAA, Sensitivity of Class, Component, and Blend Prices to Various Change in Cheese to Protein Formula, which looks at how small but significant changes in these values influence the ultimate prices producers receive. The numbers were derived by using a modification of the worksheets such as Document KK.

I also prepared Document BBB, Sensitivity of Class, Component, and Blend Prices by Changes to Butterfat Recovery, Casein Percent and Fat to Casein Ratio, which does not imply but actually computes the yields based upon the changes to the butterfat recovery and percent of casein in the protein. Using this worksheet and setting the values to those in the current formulas, I

used the Scenario function of the Quattro spreadsheet program calling for iterations as discussed below. Each of the three values, butterfat recovery, casein percent and fat to true protein ratio were independently and individually adjusted. Document AAA summarizes the result of that analysis.

Table 1 of Document AAA considers the impact of changing the implied butterfat recovery in the formula from the stated, but reduced, 90 percent by 1 percentage increments to 100 percent. The impacts relate changes from the current formula. Since protein is only used in Class III and, depending on the Class IV price, Class I, the changes to those prices at the standard tests and at actual test are computed as well as a blended value. For example, changing the formula to imply 94 percent would result in a 10.5 cent increase in the blend price.

Table 2 of Document AAA shows the effect of changing the casein as a percent of protein. As explained in detail later, the current casein percent of 82.2 percent inaccurately reflects the percentage of casein in, and I want to add

the average milk producer milk.

This table compares the result of .0 -- I'm sorry, this table compares the result of a .10 percent change in this factor on the component, class and blend prices. For example, a percentage of 83.2 percent would result in a change of 2.3 cents per hundredweight in the average blend, or over a thousand dollars per year to an average producer, assuming no other changes.

Table 3 of Document AAA looks at the sensitivity of changes to the butterfat to true protein ratio. Currently in the formula it is 1.17. The table looks at the impact by raising it to 1.23 at 0.01 increments. For example, use of 1.23 results in a 3.7 cent blend price increase.

In summary, consideration of these factors and arriving at the most appropriate will have a significant impact on producer blend prices.

Use the correct casein percent in true protein of milk at average test.

We propose adjusting the formula to reflect the ratio of casein to true protein at weighted average producer test. USDA uses the weighted

average price as reported by NASS as the starting point for formulas. It is appropriate, in fact virtually required, that the weighted average or averages, where appropriate, be used in the other parts of the formula.

The USDA decided early on in the FAIR Act order reform to use true protein rather than total (crude) protein. The difference between true protein and total protein is the amount of non-protein nitrogen, or NPN. True protein is not a fixed percent of total protein. Traditionally, true protein was measured and the total protein was calculated by adding a factor back to the true protein. This is one reason USDA decided to use true protein. The amount of NPN in crude protein varies, but a study done by personnel at USDA AMS and Cornell determined that a fair factor for non-protein nitrogen is an unchanging .19. Document CCC, David M. Barbano and Joanna M. Lynch, "Frequently Asked Questions: Changing from Crude Protein to True Protein," May 14, 1999.

Since true protein for milk with a crude or total protein test of 3.20 is 3.01, milk with a crude protein test of 3.1 would have a true

protein of 2.91, not 2.916, which would be the calculated true protein if calculated by a simple ratio.

Because non-protein nitrogen is a fixed number, the use of a fixed percent of casein in the Van Slyke formula can result in discrepancies if producer milk has a protein test different from that assumed when the percentage in the formula is calculated.

Document DDD, Comparison of Casein in Crude Protein to Implied Casein in True Protein at Two Rates, was prepared by me to analyze the relationship between casein in crude protein and in true protein in tabular form. In the Final Decision of 2002, USDA stated that the percent of casein in crude protein was 78 percent, 67 Fed. Reg. at 67928. With that as a starting point, one can compute the amount of casein in crude protein by simple multiplication.

In Document DDD, the leftmost column, Percent of Crude Protein, lists various crude protein percentages from 2.9 percent to 4.0 percent in increments of .05 percent. The second column, NPN, is the amount of non-protein nitrogen, a fixed .19 percent. The third

column, True Protein, represents the amount of true protein which is the simple difference of the crude protein and the NPN. The fourth column, Percent of Casein in Crude Protein, is the percent of crude protein which is casein, or 78 percent. In the fifth column, Casein, I computed the amount of casein by taking 78 percent of the crude protein.

The sixth column, Percent of Casein in Formula, represents the factor used in the current cheese to protein portion of the component pricing. The seventh column, Casein Implied in Formula, computes the amount of casein that is implied in the current formula by taking the percent of casein in the formula times the true protein. The eighth column, Implied Less Actual, determines the difference between the casein computed by taking 78 percent of the crude protein and the casein computed by taking crude protein less .19 and that times 82.2 percent as in the current formula.

The ninth column, Percent of Casein Proposed, uses 83.25 percent instead of the 82.2 percent. Document O and Q show the average butterfat tests and true protein of producer

milk in each of the orders. The average for butterfat is 3.69 percent and for true protein is 3.05 percent. Additionally, Documents BB and CC show the percent of butterfat and protein used in Class III. The latter shows an average of 3.69 percent butterfat and 3.04 percent for orders that pay on components.

The current formula has an implied 82.2 percent casein. This is incorrect for producer milk at the average weighted tests in the market. Document DDD shows that all farmers with less than 3.56 percent true protein are penalized by the inaccurate implied percentage in the current formulas. That is the point when 82.2 percent of true protein equals 78 percent of crude protein. That is a full half point of protein higher than the average. We do not have studies showing the distribution of protein rates, but the number now used as a basis for milk pricing only applies to higher protein yield cattle, mostly in the Jersey, Ayrshire, or Brown Swiss breeds. And Guernsey, for those who have noticed that.

The formulas that use weighted average prices for commodities should also use weighted

averages for true protein. The range of the average is very small. Since 2000, the all market average is 3.00 with a standard deviation of plus or minus .07. To accommodate the highs and lows would mean utilizing a factor for casein from 8.2 percent to -- 83.2 percent to 83.3 percent. 83.25 percent is sufficiently accurate.

With that in mind, the appropriate ratio of casein to total protein is 83.25 percent at the weighted average true protein test within the Federal Milk Marketing Orders. Applying this casein percent to the Van Slyke formula, the result would be as follows:

The protein yield equals the casein percent times the protein pounds. That product minus .1 and that difference times 1.09 divided by the dry matter, and I worked down, it's in the document, each of the numbers, it comes down to per pound 4. -- or it comes down to a total of 4.202519, and to reduce that to the yield for a pound of protein, you divide the 4.202519 by 2.9915 and that comes up with a result rounded to three decimal places of 1.405.

Document EEE, Comparison of Impact on

Class, Component and Blend Prices by Changing the Percent of Casein in True Protein to Current Formulas, was prepared by me and changes only the protein yield in the formulas and then recomputes the component, class and blend prices. The change would increase the Class III, and through that the Class I, prices by seven cents and overall improve blend prices by five cents, for an annual average gain per producer of $1,277.

The butterfat recovery in the cheese to protein formula should be adjusted.

The current cheese formulas price protein based upon an effective butterfat recovery of 89.40 percent. This recovery is calculated by reducing an assumed 90 percent recovery by a factor for farm-to-plant shrink for all milk and for butterfat. The basis for using 90 percent before the farm-to-plant shrink is found in the 2002 Final Decision, which is stated in here and is found at 67 Fed. Reg. 67907, 67929, November 7, 2002.

These bases stated in the Final Decision are unreasonable and unsupportable today. First, Kraft does not make the commodity cheddar

cheese reported in the NASS survey, but makes a higher quality cheese that has a different value and is produced in a manner different than commodity cheddar cheese, testimony of Mike McCully, page 1116-18, March 2, 2007. Similarly, Leprino does not make any commodity cheese. In any event, basing the value of milk produced by farmers in 2007 using plant efficiency information for cheese vats now more than 20 years old is simply wrong.

The final statement in the decision, "The preponderance of the record indicates that most cheese manufacturers should be able to obtain a 90 percent butterfat recovery" is true. So low is the 90 percent to reality that not a single plant has complained about the yield. If it represented average production in cheese plants, then there would be someone on the short side. The only parties on the short side of this factor are producers.

In addition to the inapplicability of the previous rationale for a 90 percent butterfat recovery, the surveys and studies relied upon to set make allowances show that plants are, in fact, realizing yields significantly higher than

those implied in the current price formulas.

Parenthetically, I want to note that those of you who received a preliminary copy of my statement, that the portions found in it at approximately pages 36 to 39 have been withdrawn and the following statement, which is my sworn statement, will differ from those pages.

California in its plant cost surveys provide some information regarding yields. The CDFA 2003 cost study for 2002 reported a weighted average yield of 10.85 pounds of cheese per hundredweight of milk. The weighted average moisture was 37.08 percent and the weighted average vat tests were 3.95 percent fat and 8.95 percent solids not fat, Document FFF, CDFA Cheese Processing Costs Released November 2003.

For 2003, CDFA reported a weighted average yield of 10.92 pounds of cheese per hundredweight of milk. The weighted average moisture was 37.12 percent, and weighted average vat tests was 3.94 percent fat and 8.95 percent solids not fat, Document GGG, CDFA Cheese Processing Costs Released November 2004.

For 2004, CDFA reported a weighted average yield of 11.53 pounds of cheese per

hundredweight of milk. The weighted average moisture was 37.04 percent, and the weighted average vat tests were 4.02 percent fat and 9.05 percent solids not fat, Document HHH, CDFA Cheese Processing Costs Released November 2005.

Exhibit III, Cheese Manufacturing Costs, Current Study Period: January Through December 2005 with Comparison to the Same Time Period Prior Year (2004), reported a weighted average yield of 11.89 pounds of cheese per hundredweight of milk for all cheeses and 12.20 pounds of cheese per hundredweight of milk for 40-pound blocks. For all cheeses the weighted average moisture was 37.22 percent and the weighted average vat tests were 4.35 percent butterfat and 9.30 percent solids not fat. For blocks, the weighted average moisture was 38.04 percent, and weighted average vat tests were 4.29 percent fat and 9.17 percent solids not fat.

These reports are summarized by me at Document JJJ, Estimating California Butterfat Recovery, Table 1, Summary of CDFA Cheese Processing Yields.

Not yield -- okay. These numbers do not

directly answer the butterfat recovery rate. Based upon a phone conversation I had with Venetta Reed of CDFA, the yields -- I confirmed that the stated yields are vat yields, not yields from producer milk. Relying on the standard of identity to make commodity cheddar cheese, the input has to be milk, cream or skim milk. Document PP. CDFA reports the utilization of solids fat and nonfat in its classes. Class 4b is equivalent to the FMMO Class III. Document KKK, CDFA Class Utilization 2002 through 2005, is a report that I prepared that comes from the CDFA Web site where it reports utilization by each class. I took the Excel report available at that site and inverted it so that it starts with 2002 and ends with 2005 (to match the time of the studies). CDFA has the practice of putting the most recent data at the top, but it is otherwise the same data available there. Document LLL, Milk Pooling Comparative Statement 2004 to 2005, is a report of CDFA summarizing pool data.

Cheese yield is a function, in part, of protein but not total solids not fat. California does not report protein separately

from the other solids not fat. To arrive at the protein value, it is necessary to look at other sources. One such source is information from Dairy Herd Improvement Association, or DHIA. The Document MMM, Annual Summary DHIA Records California 2002 through 2005, comes from the California DHIA Web site, www.cdhia.org. The information from these sheets came from the annual summaries at that Web site. These reports are summarized in Document JJJ, Table 2, Summary of Component Tests Reported by DHIA California.

To arrive at what the butterfat recovery is at these plants, it was necessary for me to use a mass balance of a cheese and whey powder plant computation. Exhibit 34 is a spreadsheet compared entirely by me. It represents the flow of components into a cheddar cheese plant and their allocation to products and by-products. This mass balance will permit us to approximate the butterfat recoveries necessary to obtain the kind of vat yields that were identified in the CDFA exhibits.

The process explained in this mass balance represents a simplified version of mass balances

for cheese and other product plants that I have done for my clients as we consider issues of plant participation and negotiation of prices for milk. It was totally prepared by me relying upon information that was available from public and reliable private sources. I removed the confidential information. The methodology has been tested against others who have prepared similar mass balances in the process of these negotiations and has proven itself to be appropriately designed.

Dr. Barbano at the May 2000 hearing on manufacturing formulas presented his own version of a mass balance. I did not use it because I did not prepare it, but it, too, fairly describes the entirety of the cheese making process. It is our request that this format be used in all surveys of plants for costs in order to establish the kind of mass balance found in the plants for which the make allowances are fixed. It provides a greater picture.

And at this point I want to talk about this Exhibit 34 in a little more detail.

The purpose of this modeling is -- is to try to summarize all of the complex data

necessary to determine the yields in the plant into some much more simply mathematical statements. It has the potential to reduce the cost of some of the experimentation to arrive at particular numbers and it can be extrapolated to give us some idea of what is going on in real plants. It is, in fact, really a mathematical model of a component flow through a cheese whey powder plant. I'm not proposing that you can go home and make cheese based upon this report.

The report across the top has a description which is self-explanatory. There's an unlabeled column we'll talk about in a minute. The total volume, butterfat, true protein, lactose, other solids, total solids not fat, total solids in water. The other solids in this case differs from what that's used in the Federal Order program in that it represents the solids that are not fat, that are not protein, and are not lactose, generally ash and minerals.

That unlabeled column has the inputs that are brought into the program. We'll explain those in detail when we get there, but virtually everything in that column, I think with the exception of the cheese yield, is computed.

In addition, other inputs into this particular form would be found down where we have -- down near the bottom of the first page on total vat, talks about butterfat recovery rate, it's 95 -- or 94 percent, 82.2 percent on the protein, and 38 percent for the water.

I want to summarize what happens here. I anticipate that there will be extensive Cross-Examination that will develop it further.

We start in the plant with the inputs of the milk, and we start with raw milk, and I have set the volume at one million pounds. Doesn't matter how soon or whatever. I just put the volume one million. And using tests, and I believe these were sample tests of true out of one of the California reports, you will see a line of across there in terms of actual pounds and then occasionally under each of these in lower -- or much smaller fonts will be their percent of the total volume that is in that component. It kind of gives us a way of following what's going on.

So we have the butterfat, the protein, the lactose solids, all that came in. The program would have allowed for the use or the

introduction of starter condensed. As far as the starter, the only information I had I felt was confidential. It amounts to -- I think by standards of identity to only 1 percent or less of the input, and I decided not to put that in there. I don't think it changes really what I want to show this -- this report to be.

The condensed, you can allow for condensed as a fortification. Again, it wasn't necessary, and all I wanted to reflect again what the milk was that -- the effect of milk coming delivered.

The whey cream is the amount of whey cream that was recovered from a prior process, a vat of a similar amount of milk and similar components. A hundred percent means we incorporated all of that that was available.

We then gross out the volumes, and I put in a single line here of .15 percent of in plant product reduction. In the models that we did, we actually went step by step as product was being handled and based upon what manufacturers would testify or tell us the losses were, what the experience was, we put a number in there. This is a number, I put it in, the purpose of this is to reflect that there are plant losses

considered, and in the end of the day, it doesn't change our position where we want to go with these yields.

One may suggest other numbers and that's fine, that's why the inputs are there. Other numbers could be put to see what the impact would be.

And then we have the net amount of the product that's available to process. In this particular case, we separated all of the milk; it's not necessary, you know, plants can work out that percentage or whatever, but just for this one we separated all the milk, so we end up having the cream and the butterfat or the cream and the skim milk available to be added to the vat. And then that made the skim milk available in some cases to be fortified through a UF process. Sometimes the UF isn't used, sometimes the UF is used off site and it's a supply of milk and the milk is delivered already gone through the filtration process. The whole purpose of it is just to allow for that to show how that might play in there. Again, the percentage of UF milk to be used can vary, it's there, and that would leave the amount of milk

that was UFed, the amount of skim milk that's not UFed and then there's a certain amount of solids that remain in the permeate.

Traditionally, and it varies, but as you pass milk through the UF membrane, you lose -- the retentate, the part that you want to use, keeps only about a third of the lactose and about a third of the other solids, but generally keeps most of all the protein, so that's -- those are the solids passed through.

And then that gives you this column for the ultrafiltered milk retentate. The 300 percent indicates a 3X, three-to-one concentration.

And then we have the permeate that comes out, so that's the result of the ultrafiltration.

We then take for the vat contents, we add any milk that was not separated. In this case there was none. The skim milk that's not UF, and there was some. The cream, the condensed, the whey cream and the subtotal.

And then the question is -- and this varies from plant to plant how it's done. Some might have put in all of the UF, and it probably should have been in this case, and then they

would bring in the unused skim, but the question is to balance the vat to some standard, and there's a lot of research out there, and cheese makers or anything else, they all have their different versions, depends on the variety, but one of the common numbers used is that the casein to fat ratio is .70, so using that as a ratio, then we -- and we standardize to the cream because it's got the higher values, so all of the cream is used and then we try to find out enough solids to bring the casein up to that ratio, and that's the way this model's established.

Others can do it differently. I've seen it where it's -- they use a different way of doing the ratio and they standardize to the solids, not fat, but that's how this one was done.

And as a result of that, to get that mix up we determined that it was necessary to add of the -- the skim milk another 110,000 pounds. And that gave us a total vat of about 885,000 pounds of product. And you can now see that the yields are 4.4 -- not the yields, the percentages are 4.40 percent for the butterfat and 3.70 percent for the protein, as compared to

when we started out with 3.68, 2.96, and that's why the comment that its vat test is important to understand because that's not necessarily producer tests and that's -- ultimately we want to know what that does to producer milk.

I do a computation of the percentage that's used of the proteins that come from the MPC or the UF, the percent of the proteins, and we then compute using the Van Slyke formulas the butterfat yield and the protein yields and from that compute the amount of cheese and protein that's in the -- in the mix in this model.

Now, I'll be the first to admit I'm not a cheese maker in the sense of knowing how to get those exactly mixed, but the formula and the methodology permits that ability to make those adjustments to fit something that's right.

Based upon this percent -- or this percentage of butterfat recovery, this casein as a percentage of true protein and a 38 percent moisture, we computed, using the Van Slyke formula, 12.61 percent. And that gives us the amount of volume that goes into the cheese.

We go over to the next page, I've just summarized the two to show how they come

together, the vat ingredients and the amount of cheese.

Now, what's left of that, we have a stream that goes into the whey processing. I have put the process in here more for example than to show, you know, what the exact amounts would go, but typically it's a situation where you skim out the whey butter, make it available to go back into the vat, and then what is left plus the permeate and all these others are mixed up and provides a fluid sweetened whey cream which then goes through a series of concentrations, either RO or evap or other processes and then dried to reach a powder of 96.5 percent.

Now, to make sure that everything's been covered, we have this mass balance of the solids, and you can see the total inputs, which, by the way, reflect the actual total inputs before we took out the in-plant losses, and then identified where those different went, and you can see that the solids total out to equal so that we have accounted for all the solids.

Now, I did an analysis down here to talk about -- and this is really the key part of why I did this report. This is the number that I

want to get to to illustrate why I think that our approach of looking at butterfat recovery is wrong. The focus has tended to be on the single Van Slyke formula looking at a single vat. It does not represent the answer to this question: If a producer delivers a hundred pounds of fat to a plant, how much of that fat goes out in cheese outside of the plant. Taking the Van Slyke formula to a single vat for a commodity cheese plant is not going to be solved by that.

So what we have here is the pound of cheese, we have the pounds of butterfat in raw milk, which is 36,800 pounds. The butterfat in the cheese as a percentage of that raw milk is 99.48 percent. Now, if you look at the vat -- the fate that showed up in the cheese through this one vat, it's 94.25 percent. The point that comes out here is that this would have been -- theoretically the way this model was set up is this was the second vat. The first vat used exact same information, the same process, same percentages, same inputs, same components and it yielded approximately -- and it shows up here at the top where we brought it in in terms

of whey cream, approximately 4,800 pounds of whey cream. That whey cream got added in, but that was from the prior producer. As you do this over a number of vats through the process, you get a much higher yield because you're now taking -- whatever the yield is, say it's 90 percent fat recovery, you're taking 90 percent the first time, you take that 10 percent with some loss, it gets added back into the vat and the next vat gets 90 percent of the fresh milk that is in there plus the 90 percent of the whey, so you have now recovered almost 99 -- theoretically 99 percent of the butterfat that the producer delivered to the plant.

And that is the fundamental purpose of why, you know, we did this was to illustrate how to get to that. And you can see a difference in a vat yield and an ingredient yield.

Now, what's the impact of that. If you take -- and, by the way, I do want to note, I came up in reality, I think the butter -- or the whey yields should have been lower than they were. If you take the pounds of cheese now that are produced at the plant times the cheese

price, so you're now selling -- the plant's going to sell all the cheese that it makes, and you take that times the cheese price, and I used the average price that was reported for NASS of 1.247, I came up with a value of $139,221.

Now, if, again, using the raw milk costs that are associated with the plant using in the Class III formula, you're only acquiring that on about 8 -- about 9.8 pounds instead of 11 point some, and it's 117,794.

I also estimated that in reality out of this in terms of powder based upon the amount of valuing the whey powder at the protein content rather than its total weight, you've got an equivalent of about 16,977 pounds of whey powder, and at 32.85 cents, again, the average NASS price, that gives you $5,577, so the gross between the cheese and the whey is $144,798 off of this milk that came in.

Using the Class III pricing system, which is how they pay for this, without any premiums or anything, it's $117,794. Now, ordinarily in one of these mass balances we would go into a pro forma income statement where all of the costs would be detailed in great detail and

prices affixed and added up. All of that would have been confidential and it's really irrelevant, so what I've done, assuming that you have a make allowance equal to what is part of the formulas currently, you take out for the 111,645 pounds of cheese at 16.82 cents, that's $18,779. And for the 16,977 pounds I equivocate on a protein basis of the whey powder, was -- $3,320 was the cost, for a total manufacturing cost of 22,100.

The result of this is is that there was a profit by taking the amount of cheese and whey produced at the plant and the yields that were done, subtract out the costs as we provide under the Federal Order program, which is just on -- it's on all the milk, and then taking the make allowance on all of the powder and all the whey produced, we were able to come up with a profit still of about $4,900, or about 49 cents -- or about five cents a hundredweight -- I'm sorry, 49 cents a hundredweight and five cents a pound.

Now, am I saying that every cheese plant makes an additional five cents over the plant? This is suggesting that that's not unlikely. The point is is that it's to show to us two

things. Number one, as I pointed out, the butterfat utilization is understating it grossly. And by not including the yield and understanding the make allowances, we are implicitly providing an additional economic factor benefit to the plants that has not been considered to date on any of these issues.

Okay. I'm going to be returning back now to the -- I think I've covered all that.

Oh, one other issue that I want to point out that this helps us with. Using the ratio of .70 of casein to fat, we can go back to those California vats where we know what their butterfat was and estimate a likely casein content or protein content and determine what the butterfat recovery is.

And I did that by a formula of taking .7 times the butterfat percent and dividing that by .78, and that gives us a ratio of fat to casein, and using that number we can approximate a protein value in those vats. And the result of that was for 2002, 3.54 percent; 2003, 3.54 percent; 2004, 3.61 percent; and 2005, 3.90 percent. And now using that information, over that four-year period I came out with an

average vat, per vat, of butterfat recovery of 93 percent, with ranges as high as 95.

Now, with that -- that coupled by the fact or the reincorporation of the whey shows that there should be a higher butterfat.

I now want to go back to the statement.

These estimates of butterfat recovery fairly state what is happening in those plants. Several other observations support these levels. First, the California DHIA report of 2005 showed a composite 3.68 percent butterfat test for the entire state. See Table 2, Document JJJ, Summary of Component Tests Reported by DHIA California.

For the same period as the DHIA report, CDFA's cheddar cheese processing costs study showed that the composite average vat butterfat in all the plants in the study was 4.35 percent. This study encompassed virtually all of the cheddar cheese produced in California. The difference between 4.35 percent in the cheese and 3.68 percent in the raw milk supply is .67 percent of butterfat. This is not additional butterfat in terms of pounds, but represents, as shown earlier in the mass

balance, the concentration of the milk received from the producers.

The concept that the total butterfat recovery of a plant, that is the -- that is that percentage of the butterfat that comes in the plant door that goes out as cheese is higher than the stated 90 percent is much easier to understand when one takes even a 90 percent recovery vat. If the 10 percent remaining, the whey butter, is added into the next vat with the raw milk and that gets a 90 percent butterfat recovery, then effectively 99 percent (that is 90 percent in the first pass and 90 percent of the remaining 10 percent in the second pass) ends up in the cheese.

Part of the CDFA formula includes a computation for whey butter. Document NNN, California Milk Pricing Formulas. It includes a factor for .27 pounds of whey butter. With an average butterfat test of 3.68, this implies that nearly 93 percent of the butter is recovered in the making of the cheese; 3.68 minus .27 divided by 3.68 equals .9267. Again, because of the policy to understate the value of milk to plants, this recognition of whey butter

overstates the amount so as to understate the actual recovery in the plants.

More to the point, as a service to a client I was asked to analyze several years' worth of milk checks received from a cheese plant in California. In this case, the producers received payment based on a cheese yield formula. Each load of milk was tested for butterfat and protein and the yield of that milk computed or determined. In total, I analyzed hundreds of such individual computations of yields. The formula for computing yields was overtly not stated, but was consistent with the use of the Van Slyke formula, 78 percent of casein to total protein and 94 percent butterfat recovery. Similar analysis for producers selling milk to plants in other states where modern plants pay on a cheese yield formula, the implied yields reflect butterfat recovery in the same or higher range.

The RBCS study introduced at the 2006 hearing on make allowances reported a cheese yield of 10.4 pounds per hundredweight on all cheeses and 10.7 pounds per hundredweight on 40-pound blocks. A copy of that report is

Document OOO, Charles Ling Testimony Exhibit 18 in 2006 Make Allowance Hearing.

Applying FMMO average tests of butterfat and true protein, 3.69 percent and 3.04 percent respectively, the results show a butterfat recovery of 95.25 percent for all cheeses. Document PPP, Estimating Butterfat Recovery on RBCS Report.

Unfortunately, the Cornell study introduced at the 2006 hearing on make allowances failed to survey and report plant yields. That is a critical error in both planning and execution that should not happen again in any USDA study aiming at obtaining the correct pricing formulas.

Document QQQ, Exhibit 65 from the 2006 Make Allowance Hearing, showed a New Mexico plant with a 10.25 pound yield of 38.8 percent moisture. Average component tests for New Mexico are 3.58 percent and protein 3.06 percent. Using the same methodology for the RBCS study, the estimated butterfat recovery was 93.4 percent.

Other studies and publicly available evidence recognize that butterfat recovery

higher than 90 percent are expected in modern plants. In his text on cheese manufacturing, Vikram Mistry, a professor of Dairy Science, I guess it's the late Mr. Mistry, at South Dakota State University demonstrates the Van Slyke formula with a butterfat recovery of 93 percent, Kosikowski and Mistry, "Cheese and Fermented Milk Foods," Vol. 1, Third Ed. 1997, pages 623-24. It's not the late Mistry, it's the late Kosikowski.

Prior to the use of end product pricing, the price support for cheese was 10.1 pounds for 100 pounds of milk at 3.67 percent butterfat, which reflects a 92 percent butterfat recovery, and that was based on technology more than 20 years ago.

Manufacturers --

MR. VETNE: Your Honor, before we continue on here, we can't unring a bell, I guess the exhibit's been marked, but the next couple paragraphs refer to a cheese vat manufacturer and a press release and promotional material from the cheese plant manufacturer.

It's pretty common experience of manufacturers to engage in a little puffing, and

that may be what this is, but we don't know because the manufacturer is not here, but I assume like other -- other manufacturers of goods and services, there will be puffing involved. You know, "up to"; you know, what does up to mean. Well, it means there's stuff below that.

So I object to this.

JUDGE PALMER: I'll sustain the objection. I'm going to mark it, it's on page 40, and it starts where -- right where it says "A press release from Scherping Systems"?

MR. VETNE: Right where it starts "Scherping Systems, a manufacturer of cheese vats, installed four new vats at the Cabot (Agri-Mark) plant in 2002." And I would also note that one of the exhibits shows the installation was in 2004, I mean, so we've got a disconnect here between the dates given.

JUDGE PALMER: I'll sustain the objection because it's a press release. I think that's -- can't quite rely on that.

MR. MILTNER: Your Honor, we'd like to -- I guess you've already ruled, but we'd like to include it in the exhibit packet as an offer of

proof.

JUDGE PALMER: It'll stay in there --

MR. YALE: Let me explain also what its use is. I mean the use is not to take this and say okay, this is the make allowance we're going to use. The point of it is is to indicate that publicly plants and the makers of the equipment are indicating that the level of butterfat recovery is higher than 90 percent. At what level, this cannot be used to establish what that level is, but it clearly establishes that that's not the level today, and I think in that regard it is the statement against interest of them and it's a statement that does indicate --

JUDGE PALMER: I'd let it be used for cross-examination but not as direct evidence. We won't receive it, but I've heard what you've said. It'll stay in the exhibit as part of an offer of proof.

MR. YALE: Moving on. Finally, a comparison of FMMO average tests on all producer milk and FMMO tests for milk that goes into Class III shows that virtually all butterfat from producer remains in cheese - effectively a 100 percent butterfat recovery. Compare

Document CC, Table 23 - Butterfat Test of Producer Milk Used in Class III Products, by Federal Milk Order Marketing Area, 2006, showing 3.69 percent with Document O, Table 8 - Butterfat Test of Producer Milk, by Federal Milk Marketing Area, 2006, showing the same butterfat percent.

MR. MILTNER: Excuse me one moment. Your Honor, can I get a clarification on your objection, your sustained objection. Is that only as to Document RRR?

JUDGE PALMER: Right, it's only as to the statement that I saw on page 40 and 41.

MR. MILTNER: There are two documents, one of which Mr. Vetne spoke to, one of which he did not.

JUDGE PALMER: Well, you explain your objection. Is that just to --

MR. MILTNER: The final sentence of -- the first full sentence on page 41 I don't believe was moved to be struck and I don't believe that you did strike it.

MR. VETNE: Well, my objection was to that paragraph and to the two accompanying exhibits, both of which are Scherping promotional

material.

MR. MILTNER: Well, a proposal is not promotional material.

MR. YALE: Let me explain -- thank you, Counsel. I'd forgotten about that. SSS has nothing to do with Cabot. Other than that, I'm going to make no other identity of where it comes from because it's some confidential information, but this is the information that the most common manufacturer of vats in the United States is presenting to manufacturers of cheddar cheese what they're going to expect from the equipment when it's installed.

MR. VETNE: That's my point exactly.

MR. YALE: And that is -- for me as an expert to testify or me to even testify in terms of my opinion why I think the 90 percent is too low, the fact that I have information available to me that shows that this is being sold at a higher rate ought to be made part of the record to show that the 90 percent is too low. That's all it's there for, is to indicate that that's -- because in the Federal Order in the Final Decision, it said that based upon the fact that vats installed before the 1980s weren't

used in those yields, I think it's important to get some information in here showing what there is floating around of expectations in 2007.

JUDGE PALMER: Well, we'll allow the record to show that you've obtained information that the manufacturer of these vats say that they can get higher yields, but as far as that statement as to what those yields would be, I'll sustain the objection.

MR. YALE: That's fine.

JUDGE PALMER: Okay.

MR. YALE: Based on these facts, we know that butterfat recovery in the cheese making process is far greater than the ostensible 90 percent or the actual 89.4 percent that is the current formula. The current formula grossly understates the butterfat recovery that plants obtain given using the make allowances which they claim.

Just as the 94 percent is implied in the cheese yield from butterfat, so should the same factor be used to adjust the butterfat value in the formula. Thus, with only the changes to the butterfat recovery, the formula for protein should be as follows, with changes in bold

italics, and that is the protein equals the cheese price minus .1682, that difference times 1.383, we then add to that the following computation. We take the cheese price minus .1682, multiply that difference by 1.653, and then we subtract from that .94 times the butterfat price, and that difference we multiply by 1.17 and then that is added back to the protein value that we computed before.

Document TTT, Comparison of Impact on Class, Component and Blend Prices by Correcting Butterfat Recovery in the Cheese to Protein Formula, prepared by me, shows the impact of adjusting the butterfat recovery to 94 percent. The resulting factor in the butterfat adjustment would go from 1.572 to 1.653. The protein component price would rise 4.05 cents, the Class I and III would increase, at test, 12 cents, and the blend price would increase 9 cents. The average dairy farmer would receive an additional $2,180 per year as a result of this necessary correction.

MR. ROSENBAUM: Your Honor, before Mr. Yale continues, I have an objection to the next two pages of his testimony.

This is a proposal to change the fat to protein ratio in the formula from 1.17 where it currently is to 1.214. You can see that in the first paragraph.

Your Honor, this is not part of the noticed hearing. This proposal is not covered by the notice, and we therefore object to pages 42 and 43 and to this proposal being considered.

JUDGE PALMER: Speak to that, sir.

MR. MILTNER: Your Honor, all of the manufacturing price formulas and all of the factors are open for debate. This is a logical outgrowth of the proposal that had been noticed. Everyone's on notice --

JUDGE PALMER: Let's go to the proposal, guide me through it. I don't remember it --

MR. MILTNER: Sure.

JUDGE PALMER: -- that clearly. That would be Exhibit 1, I guess, would it not? Or 2?

MR. MILTNER: 1.

JUDGE PALMER: 1.

MR. MILTNER: The notice, Your Honor, is that the national public hearing is being held to consider and take evidence on proposals seeking to amend the Class III to Class IV

product price formulas applicable to all Federal Milk Marketing Orders.

Dairy Producers of New Mexico are the proponents of Proposal 6, 7 and 8. Proposal 6 speaks directly to the butterfat shrink adjustment and yield factor in butterfat recovery. Proposal 7 talks about eliminating farm-to-plant shrink and butterfat shrink. Proposal 8 talks specifically about the product price formulas, changing the yield factors.

JUDGE PALMER: Do we have anything about fat to protein, though?

MR. YALE: It's in the formula, Your Honor. Can I speak to that? I mean he's giving the legal argument, but I have the factual part.

JUDGE PALMER: All right. I'll let you explain it.

MR. YALE: The protein formula, component formula in the Federal Order Program is a combination of taking the protein, value of the protein in the milk and then you adjust the difference between the Class III butterfat and the Class IV butterfat values. And we -- as we went through this formula, by proposing these changes in the percentages of the butterfat

that's being used and changes in the butterfat price to jibe those up to being used, the average values of butterfat and protein, as I've testified for the last hour or so on that, you come up to this level, and what happens now is although we've corrected all that, all of the sudden the rest of that formula that's in the protein formula, it's in the -- that .117 or we want to make it .124 -- 14 is part of the formula that's in the -- that's being subject to change, and it's necessary, in our opinion, to be consistent that the same standards that apply all along have to apply here, otherwise we're going to have a disjuncture in the program.

Anybody that's come to these hearings -- this hearing knew that that protein, that step that I've mentioned and quoted several times was going to be at issue. We're just proposing to get it all consistent.

JUDGE PALMER: Counsel at Government table, confer with Mr. --

MR. BESHORE: Your Honor, may I?

JUDGE PALMER: -- Rower and give some thought to this.

Yes, I'll hear from Mr. Beshore meanwhile.

MR. BESHORE: Marvin Beshore for DFA and Dairylea.

I think Mr. Yale's testimony with respect to this aspect is fair and within the hearing notice, both in terms of the general hearing notice which Mr. Miltner described, and the fact that, as Mr. Yale has testified, the -- this adjustment in the innards of the formula is a logical outgrowth of the other specifically noticed and requested changes to the formula. And we all know that logical outgrowths are quite permissible within the scope of these hearings.

JUDGE PALMER: Well, if you can prove to me it's logical. I can't read it that well. Help me with the language in the notice. What are we looking at, Proposal 6?

MR. BESHORE: The overall language in the notice talks to III and IV formulas. 6, 7 and 8, as Mr. Miltner just went through them and as Mr. Yale testified, the adjustments that are specifically provided for in those proposals lead to this corollary adjustment in the formulas.

JUDGE PALMER: Let me see what it says.

Proposal 6 says they want to change the butterfat shrink adjustment, yield factor and the butterfat recovery percentage, and this one's going to do what, this is going to get fat to protein, is it, protein different?

MR. YALE: In the formula, we start off with just computing the value of the protein by determining, you know, this straight formula, that you take the value of cheese, subtract the make allowance, and you take it times this yield, and currently in the formula it's 1.383.

Well, for -- we had originally proposed, as you know, and we withdrew it, was a proposal that that would be the end and that was the protein formula and there was no more adjustments to be made, and that was what we called a separate Class III and separate Class IV butterfat proposal. That was withdrawn.

And the Department uses, and we're accepting and willing to go along with that, uses basically the same formula to compute butterfat for all four classes of milk.

The problem is is that the value of butterfat valued in Class III is a -- is based on the cheese price. The value of butterfat in

Class IV is based on the butter price. They're not the same, and their yields are different, so the Department says we want Class III to be priced at the Class III butterfat price -- or a Class IV butterfat price, so without giving an unnecessary adjustment up or down to the Class III price, we have to adjust one of the components by a factor so that the value of the Class IV butterfat is there and you don't do any undue enhancement over here in the protein. That's what that .94 is doing.

JUDGE PALMER: What I'm concerned about is whether or not folks such as those represented by Mr. Rosenbaum had adequate notice of this so that they could be prepared, and that's why I now would like to hear from the Government's attorneys.

MR. STEVENS: Your Honor, we discussed it. Garrett Stevens, Office of General Counsel.

It is true, I guess, that the number that is out there is 1.17. The number in this testimony is 1.214. We agree with Mr. Beshore's point that this is -- this might be considered a reasonable adjustment to the hearing notice that was issued. The evidence will tell whether such

an adjustment is supported by the evidence. If it's not, obviously the Secretary wouldn't make the change. If it is supported by the evidence, he might consider the change, and then it would be subject to comment, and we would take the comments, consider those and determine whether the final result should be what was originally determined or what is proposed or something else.

JUDGE PALMER: I'm going to be guided by you, and overrule the objection. And you have a -- an exception. All right, sir.

MR. YALE: All right. Thank you for the order, Your Honor, so we've got that clarified.

Change the fat to protein ratio in the butterfat adjustment to the protein component price.

Following the goal that in fixing values, wherever practical, the weighted average should be used, the weighted average of the FMMO system of fat to protein is 1.214 and thus that should be the number for the formula protein adjustment, not the current 1.17.

The current cheese to protein formula adjusts the simple protein component price to

act as a residual to the difference between the Class IV butterfat and the value of butter used in cheese. In simple terms, the difference between the two different butterfat values will be carried by the protein so that the overall value of Class III at test will not change as a result of changing the butterfat value.

Since the adjustment is being stated per pound of protein and there is less protein than butterfat, the rate of adjustment, first computed as per pound of butterfat, has to be increased so that on the fewer pounds of protein the same total value is adjusted. In that regard, the current formula uses the ratio of 1.17. This represents the ratio of standardized tests of 3.5 percent butterfat to 2.9915 percent true protein.

The problem with that ratio is that it represents a small fraction of the milk actually delivered by producers. According to Document OO and Document PP, the average tests for butterfat and protein are 3.69 percent and 3.04 percent respectively. This represents a ratio of 1.214. Document UUU, Ratio of Butterfat to True Protein at Various Tests,

prepared by me, shows the ratios of butterfat to true protein through a range of 3.2 percent -- from 3.2 percent to -- through 3.8 percent butterfat and 2.85 to 3.65 percent of true protein. The increments are .05, except that 2.9915 percent was inserted as a row and 3.69 percent was inserted as a column to show where the current ratio falls and the proposed one would fall.

Having the ratio incorrectly as the standardized tests effectively undervalues milk at test for more than one-half of the producer milk marketed in the FMMO system. Again, since the starting point is weighted average prices for the products, the concept of weighted average should pass through the entire program. After all, it is the milk at test that plants purchase, not standard test milk.

Document VVV, Comparison of Impact on Class, Component, and Blend Prices by Correcting Butterfat to Protein Ratio in the Cheese to Protein Formula, prepared by me, shows the impact on producer prices by making this change. The impact on the protein component price is 2.24 cents. Prices at test increase seven cents

and the blend price increases five cents, with the average producer at her or his test receiving an additional $1,217 per year. The impact goes beyond that, however, because it multiplies other changes that are being proposed such as changes to the butterfat recovery.

Summary of changes to the cheese protein formula.

Based on the testimony above and the supporting documents, we are recommending changes to the cheese to protein formula to, one, imply a 94 percent butterfat recovery; two, recognize that 83.25 percent of true protein is in casein, and, three, adjust the butterfat to protein ratio to 1.214. Utilizing these adjustments, the formula should be as follows:

Protein equals the difference of cheese price minus .1682 times 1.405 and the cheese price minus .1682 times 1.683, that -- from that we subtract .94 times the butterfat price times 1.214, and that last difference is added to the protein price that we just computed.

Document WWW, Comparison of Impact on Class, Component and Blend Prices by Correcting Yields to the Cheese to Protein Formulas,

prepared by me, shows how all of these changes to the formula will impact the various prices. The protein component price would increase by 8.82 cents. The Class I price at test would increase by 27 cents, the Class III by 26 cents, and the blend price by 20 cents. The average dairy farmer would receive an additional $4,743.

Change to the yield factor for nonfat dry milk to 1.02.

USDA in setting the nonfat dry milk yield stated -- and we quote this section, it's there.

Prior to the Final Decision effective 2003, the formula was a multiplier of 1. The current formula for nonfat dry milk to --

JUDGE PALMER: Just a second. Let's go off the record for a moment.

(A discussion was held off the record.)

JUDGE PALMER: Back on the record. I'm sorry.

MR. YALE: The current formula for nonfat dry milk to solids not fat states an inconsistency. According to the standards of identity, nonfat dry milk is the product of removing water from pasteurized skim milk. The resulting powder may not "contain more than 5

percent of weight by moisture." Document UU, Standard of Identity for Nonfat Dry Milk 21 C.F.R. Section 131.125. Because of the cost of drying as well as the fact that the moisture is less valuable than the powder, the expectation is that the nonfat dry milk will be sold at nearly 95 percent dry matter. The case of Extra Grade, the moisture is lower, 4.5 percent. The solids not fat component price for the FMMO pricing system is based upon dry matter with no moisture. But the current formula implies that nonfat dry milk is drier than solids not fat. According to the standards of identity, one pound of solids not fat will produce as much as 1.05 pounds of nonfat dry milk. It is impossible to produce less than a pound as the current formula contends.

It is irrational to assume that there are more pounds of nonfat dry milk solids than there are pounds of nonfat dry milk in a quantity of nonfat dry milk. Nonfat dry milk is approximately 3.2 percent moisture. Thus the Final Rule represents a loss of 5.2 pounds of nonfat milk solids in every 100 pounds of nonfat dry milk or a 5 percent loss.

Exhibit 9, admitted earlier in the hearing at page 19, includes a graphic description of the typical butter powder plant. This shows that the output from such a plant -- that, by the way, is provided by CDFA and I think I've included it in my book. This shows that the output from such a plant, output paid for by the make allowances included in the formula, is not only powder and butter, but condense and buttermilk both bulk and powder.

Document XXX, Excerpts from Stephenson and Novakovic, Determination of Butter/Powder Plan -- that should be Plant Manufacturing Costs Utilizing an Economic Engineering Approach, June 1990, A.E. Res. 90-6 and excerpts from Stephenson and Novakovic, Manufacturing Costs in Ten Butter/Powder Processing Plants, September 1989, A.E. Res. 89-12, indicates these solids are salvaged and processed into buttermilk powder.

CDFA in a nearly ten-year-old study examined actual yields in butter powder plants. It found the yields then to average 1.025. We certainly are not less efficient. Document YYY, CDFA Butter and Powder Yields, 1998. All of

these studies show a combined nonfat dry milk and buttermilk powder yield in excess of 1.025 pounds of product from each pound of solids not fat. However, buttermilk powder is slightly less valuable than nonfat dry milk and so we are proposing a yield of 1.02 pounds of solids not fat in each pound of finished product.

Thus the formula for nonfat dry milk before adjusting for the make allowance should be:

Solids not fat equals nonfat dry milk minus .1570 times 1.02.

I prepared Document ZZZ, Comparison of Impact on Class, Component and Blend Prices by Correcting the Yield of the Nonfat Dry Milk to SNF, which incorporates only the change to the nonfat dry milk yield. The change would result in a 2.19 cent increase in the solids not fat component price, 18 cent increase in the Class II at test, and 18 cent at the Class IV at test and a 4 cent blend. On the average, a producer will receive an additional $984.

With all of the changes to the yields, I prepared Document AAAA, Comparison of Impact on Class, Component and Blend Prices by Correcting the Yields, which incorporates all changes

proposed to the yields. The change would result in a 2.2 cent increase in the butterfat component price, 12.82 cent increase in the protein component price, 2.19 cent increase to the solids not fat component price and no change to the other solids price. In terms of class prices, it would result in a 43 percent increase -- 43 cent increase in Class I, 35 cent increase in Class III, 46 cent increase in Class II, 29 cent increase in Class IV, all at test, and a 42 cent blend increase. On the average, a producer will receive an additional $9,787.

Make allowances.

Our Proposal 3 seeks to adopt new make allowances for each of the four surveyed commodities. We propose the adoption of the following make allowances:

Butter, 11.08 cents.

Cheese, 16.38 cents.

Nonfat dry milk, 14.1 cents.

Dry whey, 15.0 cents.

The Basis for Our Proposed Make Allowances.

These make allowances are drawn directly from the survey of manufacturing plant costs performed by Dr. Mark Stephenson and the Cornell

Program on Dairy Markets and Policy. Dr. Stephenson compiled sample weighted average costs for each commodity that allowed him to draw inferences about the population of manufacturing plants located in Federal Milk Marketing areas.

With the exception of dry whey, the make allowances we propose are identical to those observed by Dr. Stephenson in his sample weighted average. For dry whey, we propose adopting the sample weighted average make allowance for nonfat dry milk and adding in the additional cost attributable to the energy needed to make dry whey. Dr. Stephenson's survey indicated that this additional energy cost was approximately 9 cents per pound of product. The testimony in past hearings suggested that this additional cost was 1 to 2 cents per pound of product. Our proposal adds .9 cents to the proposed make allowance for nonfat dry milk.

California Data Should Not Be Included in This Federal Price Formula.

The California study, a virtual census of manufacturing costs for plants in California,

cannot be used because it only reflects costs in California, and those costs are admittedly higher than the rest of the country. The California data also reflects a different mix of plants than in the FMMO system both in terms of products, but also markets, location of milk to plants, and costs.

At Document NNN, CDFA Pricing Formulas, the CME price is reduced and then a make allowance is taken off. For example, for cheese, the product value is cheddar cheese minus .0252 dollars minus .1780 dollars and then that times 10.2.

The real formula simplified combines the price adjuster with the make allowance for 20.32 cents. Document BBBB, Comparison: CME Cheddar Cheese Prices/Audited California Cheddar Cheese Sales 24-Month Period, December 2004 through November 2006, is prepared by CDFA and available at its Web site. It compares the CME cheddar price to what plants sell the cheese for. That shows that the average sales price in 2006 was not .0252 cents less than the CME, but 1.62 cents. This effectively reduces the make allowance from 17.8 cents to 16.9 cents. Even

then it is for 10.2 pounds and the FMMO price is for 9.89 pounds. The extra value of the .31 pounds at the cheese price further reduces the California effective make allowance more, bringing it almost to the 16.5 cents that we had before these changes took effect earlier this year. The formula used by USDA to consider California's make allowances, besides just the use itself, is thus fundamentally flawed as it is mixing apples and oranges.

In the case of Document CCCC, Comparison: CME Butter Prices/Audited California Butter Sales 24-Month Period, December 2004 through November 2006, this shows a higher adjustment in sales than the formula, but it should be noted that most of the butter in California is produced at less than the stated make allowance.

In addition, because the plants purchasing Federal Order producer milk have different manufacturing and regulatory costs, it is not proper to utilize California plant costs to approximate the costs for Federal Order plants.

California data was first included in the computation of make allowances to compliment the data drawn from the RBCS data. RBCS data, at

least prior to 2006, was not compiled and reported for the purpose of computing make allowances. Now that USDA has abandoned the use of the RBCS survey to set make allowances, there is no longer a need to rely on California's data to make up for the uncertain accuracy of the RBCS data. While it may have been proper to use the audited California data as a verifying and balancing factor to the RBCS study in 2000, the data for Cornell is far more complete and verifiable than the RBCS survey. The Cornell data, as a more comprehensive survey of plants in the Federal Order System, provides a sufficient basis to set make allowances.

I prepared Document DDDD, Comparison of Impact on Class, Component and Blend Prices by Correcting Make Allowances to the Current Formulas, which incorporates only the change to the make allowances. The changes result in a 62/100 cent change in the butterfat component price, a reduction of a small amount in the protein component price, a 1.58 cent increase in the nonfat dry milk and a 3.77 cent increase in the other solids component price. Overall, it would increase the blend by 22 cents per

hundredweight, with an average producer gain of $5,065.

Conclusion.

In the midst of the minutia and complexity of price formulas, the Department should not forget that the establishment of minimum prices has a real impact on dairy farmers. Absent a viable community of dairy farmers, there will be no dairy products, thus no need for plants to process dairy products, and certainly no need for a Federal milk marketing system. Whether employed by or an agent of producers or not, everyone in this room, at least for this hearing, directly depends upon the producers and their continued ability to produce the good and wholesome product that they do.

Nationwide there are about nine million milk cows, and another three million in heifers -- that should be four and a half million in heifers and dry cows. In total, farmers have investments in almost $25 billion in cattle alone in order to provide valuable dairy products. Farmer investment exceeds the investment of plants that process the milk, and the number of farm workers exceed the number of

workers in the plants.

For example, a $200 million cheese plant that requires seven million pounds of milk per day requires farms with 100,000 cows, or $450 million investment, and that's total cattle and equipment and everything, and over a hundred employees on the farm, plus many more to handle, haul, market and account for the milk.

Finally, I want to briefly address those who argue that all we set are "minimum prices" and plants can pay more. That is a dangerous view. One of the benefits of the FMMO system is that everyone is supposed to be on the same pricing system and generally the same level. This is a price risk reducer that enhances producer prices. If USDA at the urging of some of those in this hearing continue to depress these "minimum prices," producers will be forced to find other sources of reference prices for future contracts and the hodgepodge of pricing schemes will introduce additional price risk which will be felt in lower producer prices. A fairly established reference price for milk used in manufacturing is essential. These so-called "minimum prices" have been the reference price

for setting prices in the U.S. It has been a common practice to price milk at the Class III price plus, and, yes, even a minus, a basis. Document FFFF, CME Daily Dairy Report, February 23, 2007, notes that when the U.S. District Court for the Northern District of Ohio denied the motion for preliminary injunction, futures markets for Class III prices dropped up to 22 cents. As the CME reporter noted, "Yesterday's ruling was considered partly responsible for a big drop in milk futures today." What prices are set here are viewed as prices in the marketplace, minimum or not.

Our proposals will help in that regard by regaining some of the money that was lost since 2001, which should be added to the statement. More importantly, the most important tool for dairy producers will obtain more of their trust by being fair. Our proposals will result in the following formulas:

Butterfat equals butter price minus 1 point -- .115 times 1.22.

Protein is the cheese price minus .1638 times 1.405 plus the cheese price minus .1638 times 1.653 minus .94 times the butterfat price

times 1.214.

The solids not fat equals the nonfat dry milk minus .1410 times 1.02.

And the other solids, dry whey minus .1590 times 1.03.

I prepared Document EEE, Comparison of Impact on Class, Component, and Blend Prices by Correcting Make Allowances to Current Formulas, which incorporates only the change to the make allowances. The changes would result in a 2.83 cent change to the butterfat component price, an increase of 12.74 cents in the protein component price, 3.82 cent increase in the nonfat dry milk, and a 3.77 cent increase in the other solids component price. Overall it would increase the blend by 63 cents per hundredweight, with an average producer gain of $14,868. In comparison to Document KKK shows -- or Document KK which showed that since 2001 the formulas had reduced producer blend prices by 57 cents, the increase that we ask for is not only supported by the facts, but really only a modest seven cents over correcting incorrect portions of the formula.

On behalf of Dairy Producers of New Mexico,

Select Milk Producers, Inc., Continental Dairy Products, Inc., Lone Star Milk Producers, Inc., and Zia Milk Producers, Inc., I want to thank the Department for holding this hearing. We urge the Department to adopt Proposals 3, 6, 7, 8 and 15 as stated herein and as amended.

JUDGE PALMER: Anything further on your Direct testimony?

MR. YALE: I don't have anything further.

MR. ROSENBAUM: Your Honor.

JUDGE PALMER: Yes, sir.

MR. ROSENBAUM: Your Honor, I feel a little bit bushwhacked here. Not only were we supposed to have seen these things a week ago, but we got his testimony last Wednesday, and now we get his final testimony, he's dropped three pages of it, replaced it with this Exhibit 34, and then ran through it in a way I could not follow, and it's really leaving us in a situation that's quite unfair.

At a minimum, I'd like to ask him some questions today about Exhibit 34 because I can't possibly ask meaningful Cross-Examination without doing that.

JUDGE PALMER: The reporter's okay to go a

little longer?

MR. YALE: Could we have a break before we do that?

JUDGE PALMER: Yeah, let's take a five-minute break or so and then we'll ask some questions on that.

(At this time a recess was taken.)

JUDGE PALMER: All right. Back on the record.

CROSS-EXAMINATION,

QUESTIONS BY MR. STEVEN J. ROSENBAUM:

Q Mr. Yale, I've got some questions about Exhibit 34. At the top, there's a row called raw milk that has volume numbers beginning with a million.

A Yes.

Q Do you see that?

A Yes.

Q And that's assuming what, a million pounds of raw milk?

A A million pounds of milk going into the silo from the farm.

Q All right. Now, you have -- you then break down that milk in various components.

A That's right.

Q And you continue going from left to right.
A That's right.
Q Where -- and, for example, you're assuming that the butterfat content is 3.68 percent; correct?
A Right.
Q And that's why you have 36,800 pounds of butterfat; correct?
A Right.
Q And you have similar percentages for true protein, lactose, other solids, total SNF, total solids and water; correct?
A Correct.
Q Where do those all come from?
A These were -- I can't tell you -- I'm trying to remember -- I'm thinking this came off of one of those DHIA California, but it was representative of just -- as you know, raw milk comes in from the farms in all kinds of levels, and the purpose was to come up with a level that, you know, was somewhat representative of what one might find in the milk.
Q Well, you put in as exhibits various information from DHIA; correct?
A Yes.
Q And is there a sheet that has those same numbers

that now appear --

A No, I don't know that there are. That wasn't the purpose. I don't think that there's a sheet in here -- if you give me a minute, I'll look to see, but I don't know that there is necessarily a sheet that would show specifically that that's where those numbers came from.

There may have been some other source of information that I had from some other sample milk or something that I put in there. I did not view the exact percentages there as being -- they are representative of milk one would find someplace within the system. And the question wasn't so much what it was, but how do those solids that do show up work their way through the plant.

Q Well, but, for example, the ratios of casein to butterfat are critical for determining yield; right?

A That is correct.

Q Now, you -- going further down on Exhibit 34, there's an entry for whey cream; correct?

A Yes.

Q And do I understand that to mean that your analysis here assumes that whey cream that's

been produced in the cheese making process is being added back into the vat to make cheese?

A That's exactly what's happening.

What -- what we did, Mr. Rosenbaum, is I took this same -- exact same spreadsheet that you see here, okay, everything being the same with one difference, and that is that where it says whey cream, it was zero, all right, and it computed and went through this whole process and it comes down and I -- you know, as you notice on the left -- or the right side, I have numbers. If you look down at page -- or page -- it's on the second page, line 69, there was a computation of whey cream, so on the exact same spreadsheet other than we didn't introduce the whey cream up there in the inputs, I computed this as a background to the one that's printed out here, that came up with a value which in this case happened to be 4,861 pounds of whey cream, and that was brought in to be added into the vat. That's where that number comes from.

Q The ultimate butterfat recoveries here are being driven in part by the assumption that the whey cream is being reprocessed into cheese; is that right?

A That is fundamentally the comment that I'm making, yes, which I understand to be common in commodity cheddar cheeses.
Q You've not conducted a study of that, I take it?
A Well, it's in the discussions that we've had over the years that --
Q I mean, there's been direct testimony to the contrary in this hearing; you're aware of that fact?
A Not on commodity cheeses. The testimony dealt with very special, full fat cheeses that Kraft specified for a certain level of quality. It is not for full fat -- it's not for the commodity cheeses.
Q Can you point to any specific testimony there's been on that subject, that the whey cream is reprocessed with respect to that cheese?
A I think the statement by -- the only one I think that so far we've had up to this point was the one of Mr. McCully, and I think he stated that Kraft does not do it, but I'm trying to remember whether he said that it was done, but it was not done by Kraft.

I mean, you know, for the higher quality cheeses I would admit they don't, but what we're

talking about here is the commodity cheese which NASS reports the sales price of.

Q Now, going down further, you've got a heading called milk separation; correct?

A Yes.

Q And that's where you're separating the cream?

A That's right.

Q And then there's a ultrafiltration heading; correct?

A Yes.

Q And what you're doing there is you're taking the skim milk from which the cream has been removed and you're running it through a ultrafiltration system; correct?

A That's right.

Q To a 300 percent ultrafiltration level; correct?

A Well, three-to-one concentration of the solids --

Q Okay.

A -- is approximately what it is.

Q Okay. And so that --

A Pardon me, not solids, the total volume three-to-one.

Q And that's giving you 76,204 pounds of ultrafiltered milk retentate; correct?

A Right. Seventy-six thousand, yeah, two hundred four, right.
Q Now, the next heading is vat contents; correct?
A Well, yeah, the next -- you mean big heading, yes.
Q Big heading, right. Now, there it looks like you are assuming in the vat you have 110,417 pounds of UF milk retentate; correct?
A Yes, it does.
Q And you only had produced, though, 76,204 pounds through the ultrafiltration of the million pounds that you had begun with; correct?
A That is correct. That -- that does overstate the amount of protein, I see the point there.
Q Well, my point is that your whole formula, correct me if I'm wrong, but your formula seems to presuppose you're bringing in an extra 35,000 pounds of ultrafiltered milk retentate in order to achieve the goal of 70 percent casein to fat ratio; is that correct?
A I mean you're absolutely right, Mr. Rosenbaum. That is the goal that's being done there, and why that number -- I see that, that did overstate the amount of protein that was available, and I appreciate you pointing that

out because I thought the protein was coming out high and I wasn't sure where it was, so I was rechecking it, but that is correct, that should be only 7,000 pounds of protein at that level.

Q Well, if it's only 76,000 pounds of protein, you're not going to hit your casein to fat ratio, are you?

A Well, the point is is that under this scenario with a 25 percent skim milk to be UF and the others, you're right, but what you're able to do is make adjustments in -- by the way, most of the UF milk that we were doing was like at 3.3 ratio. There's other things that can be done to adjust the amount of protein that would be available without bringing in the other solids and the fat to do that.

Q But you're going to have to do something to get the casein to fat ratio up, correct, to 70 percent, something beyond just using --

A If you use your target of 70 percent, you would have to add -- there's 3,000 pounds of protein that appears to be missing here, yes.

Q Three thousand pounds?

A Yes, 3,000 pounds of protein.

Q All right. I see it. And -- and the Van Slyke

formula is based upon a combination of how much fat there is and how much casein there is; correct? That's how you produce cheese?

A Yes, it is, so the amount of protein, if it goes down, the amount of cheese that would be produced would go down because you have less protein, that is correct.

Q All right. Under the butterfat column across from total fat, there's a 4.40 percent. Do you see that?

A Yes.

Q And there are similar numbers for true protein, lactose, etc.

A Right.

Q What is the source of that information?

A That's supposed to be the 38,945 divided by the 885,159.

Q I'm sorry, point to me -- say that one more time, please.

A All right. What the small percentages are supposed to represent is the percentage of the butter -- in this case, the butterfat column, what percentage that is of the volume under that same row.

Q So it's 38,945 divided by 885,159?

A Right.
Q And going across, each of these numbers is supposed to be divided by --
A It should all be -- it should all be the same thing.
Q So the denominator is consistently 885,159?
A That is the intent. And it's more -- with the exception of one or two places, it is almost totally for informational purposes.
Q Okay. Now, the butterfat recovery rate you show as 94 percent; correct?
A Yes.
Q Is that an assumption or is that derived?
A Yes. As I stated in my Direct testimony, that 94 percent in that row, row 52, 94 percent, 82.2 percent and the 38 percent, were all values that were inputted.
Q I mean that's the 94,000 -- $84,000 question here, right, is what butterfat recovery one should assume, and -- for purposes of the Federal system; right?
A Well, it is and it isn't. I mean it is the question here. The point of this table was to show not so much that 94 is the right number, Mr. Rosenbaum. The purpose of this was to show

that you use whatever recovery rate you use, you will have a whey butter that will come off, approximately 6 percent if it's 94, 10 if it's 90, and that the bulk of that gets added back in subsequent vats such that you are able to recover in excess of even 94 percent in the actual amount of milk that is delivered to the farms and then turned into cheese as it goes out the back end, so whether I use 94 or 92 or 96 or 90 or 89.4, I think the premise will still be supported by what we're doing.

Q If you assume the whey cream is added back in?

A The fundamental assumption in here is the whey cream is added back in for a commodity cheddar cheese of the kind that is routinely reported on the NASS survey.

Q But you don't purport Exhibit 34 to support a 94 percent butterfat recovery rate; rather, that's -- the point of Exhibit 34 is not to prove that 94 percent is the right number?

A You're absolutely right. That was not its intent.

Q Because that's an assumption in the document.

A That's right.

Q Okay. And then the -- the target composition of

61.41 percent, is that --

A You know, I think that's an erroneous, that whole thing -- that line and that -- was supposed to have been deleted, and I -- I'm not sure what that number is.

Q All right. What about the 12.61 percent?

A The 12.61 percent is the yield that was generated using the Van Slyke formula based upon the percentage of protein and butterfat that are in these products -- or in this formula; that if you were to run the Van Slyke formula, or the modified -- the Van Slyke formula based upon the 4.40, the 3.7, the 94 percent butterfat and the 82.2, that's the number that you'd receive.

Q Well, the 4.4 percent butterfat, is that -- is that dependent upon the accuracy of the 3.68 percent butterfat in the raw milk?

A 3.6 -- 3.68 percent, yes.

Q Right.

A So that if you had a higher butterfat raw milk, then you probably would have a -- the way this thing's going, maybe a higher value in the vat, or if you had a lower butterfat, you'd have a lower butterfat in the vat.

Q Is the 4.4 percent butterfat in the vat a

calculation based upon the assumed starting point of 3.6 percent?

A Yes, it is. And all those steps should be laid out here on this sheet.

Q And the same would be true for a total solids nonfat, correct, the 9.12 percent shown in the vat is dependent upon there being 8.42 percent in the milk to begin with; correct?

A If you go down through the steps, yes.

Q The 111,645 pounds of cheese, just tell me the math by which that's derived, what times what?

A The -- the way this is to work is that you have the butterfat -- the pounds of butterfat is a function of the -- trying to remember how to state this. Using the amount of butterfat that was there and the butterfat recovery and the yield, I computed the amount of butterfat that was going to be left in the cheese, and I believe -- and it may come out and I -- it's getting late, but I think that that is -- that is 94 percent of the butterfat that was in the vat that shows up in that particular cheese.

Q You're saying the 36,608 pounds of butterfat?

A Is 94 percent of 38,945.

Q And where does the 111,645 --

A Well, I do a similar computation to determine the amount of protein, and based upon I believe some ratios, the amount of the lactose and other solids, although I think those were .09, I don't have the formula right here in front of me, it has some -- I can speak to you generally, but we compute -- using the butterfat, as I said, 94 percent of the 38,945, 82.2 percent of the 32,720, we arrive at the amount of butterfat and protein, and then the factor of .09 that you see in the Van Slyke formula, and there's some modification because we're actually looking at the solids and stuff in there and the ratios of other solids to lactose, we approximate the amount of lactose that remains in this process that shows up in the cheese and the amount of other solids, because primarily in the process of cheddaring cheese, not only is the coagulation of the fat held together by the protein, but it's also significant removal of the lactose from the milk.

And then with that and then the 38 percent moisture, you're able then to back into the 111,645.

I also think -- let me check this out.

Because I think we double-checked this and it worked. Yeah, that's how we came up with those -- that's how we came up with that total. The result is that there is some variation off of the -- you know, off of the yield. But that's how we came up with that number.

Q What do you mean, there's some variation?

A Well, the 12.61 I believe is the computation used in the Van Slyke formula, which was the starting formula of figuring out what's in the cheese, but the real point of it is is you determine how much fat and how much protein ended up in the cheese and from that derive the rest of the components that comes to the 111,645.

Q So you're producing --

A Probably more cheese than what the 12.61 showed by a couple, maybe fifty, a hundred pounds.

Q On the second page, you have something called ingredient yield. Could you tell us what that means? That's the very bottom.

A Yeah.

Q 11.11.

A Yes. 11.11 was that if you just look at one vat and look at the yield with the ingredients that

came in, okay, you have an -- 11.11 percent is the yield. That's how many pounds of -- you get 11.11 pounds out of a hundred pounds of that milk at the test stated above.

Q So what's the difference, then, between that and the vat yield? What are you incorporating to result in 11.11 percent for --

A Well, the vat yield is representing the -- it's just showing the different yields. The vat yield will differ from the ingredient. That's what it's showing. The ingredient is if you just look at the ingredients, run one vat through, this is the percentage and you're done.

Q Is the difference between the 11.11 and the 12.61 percent the effect of adding the whey cream back?

A It's the effect of adding the whey cream back and the concentration of the product through UF.

Q When you were testifying before, you provided some values --

A Yes.

Q -- which don't otherwise appear in Exhibit 34. If we copied these down right, you said there was a cheese value of $139,221.

A Yes.

Q And what --
A I took the 11 -- if you look at Exhibit 34, line 45 -- I'm sorry, not 45, I apologize. Line 57, okay, so that's 111,645, and the 1.02, 47, comes from Exhibit JJ, and that was the average mass cheese price recorded for 2006 that shows up in whatever the market report.
Q All right. And then you had a whey value as well.
A Yes.
Q What was that? We didn't get that copied down. What was that?
A The value was 55,777, and I'll tell you why, and I think I may have pointed out where it was. This had run last night and we were done and somehow or another the wrong spreadsheet came out.

Based on the value of protein or the amount of protein in the whey powder, it actually shows up that the amount of protein, rather than 62,000 pounds of whey powder, it should be closer to about 17,000, 16,977, if you do it on a protein basis, and I took that number times .3 -- or 32.85 cents per pound again from Exhibit JJ and that gave a value of 55,077 --

$5,577, and then I added the cheese, the 139,221, to the 5,577 and that gives you 144,798, and that was the gross value.

Q Okay. Then you said the cost inputs were $117,794; is that correct?

A Yes.

Q That's based on what?

A That's the Class III milk price for milk at the test that show up on line 1 using the average component prices that were computed, and I think those are the ones that would have shown up in Exhibit KKK under current, or KKK and a number of others under the current pricing.

Q That's for a million pounds?

A That's for a million pounds at the test that show up at the top of line 34.

Q So you're assuming zero cost for the 35,000 pounds of ultrafiltered milk potentate you're bringing in?

A I'm not bringing that in. That's been produced at the plant. Oh, the other 25 -- yes, we would have to make some adjustment. I see what you're saying, yes. There would be some additional cost for that. I'm sorry, KK, you're right.

Q The source is KK, not KKK?

A The source is KK.
Q The KK numbers are based on what time frame?
A As I stated in my Direct testimony, I took the identified exhibits from the market administrator's office and we looked at the average for 2006 for the NASS prices. I then used the formulas as they are now stated, and I have that in exhibit in there, that are now in place for each of the butter to butterfat, protein to -- or cheese to protein, nonfat dry milk to solids not fat, the other solids to -- or dry whey to other solids price. I then used those formulas to compute what the current -- or what the component prices would be using those average NASS prices under current formula.

MR. ROSENBAUM: That's all I have for now.

JUDGE PALMER: We'll be back tomorrow morning at nine o'clock.

(At 6:17 p.m., Monday, April 9, 2007, the hearing in this matter was recessed, to reconvene at 9:00 a.m., Tuesday, April 10, 2007.)

STATE OF INDIANA)
) SS:
COUNTY OF MARION)

I, Dianne D. Lockhart, a Notary Public and Stenographic Reporter within and for the County of Marion, State of Indiana at large, do hereby certify that on the 9th day of April, 2007, I took down in stenograph notes the foregoing hearing;

That the transcript is a full, true and correct transcript made from my stenograph notes.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 17th day of April, 2007.

Dianne Lockhart
NOTARY PUBLIC

My Commission Expires:
July 22, 2007

County of Residence:
Marion County