VOLUME XI

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, July 9, 2007
1:00 p.m.
Sheraton Hotel Station Square
300 West Station Square Drive
Grand Station Ballroom I
Pittsburgh, PA 15219

BEFORE: JUDGE VICTOR W. PALMER
U.S. ADMINISTRATIVE LAW JUDGE
UNITED STATES DEPARTMENT OF AGRICULTURE

TRANSCRIPT OF PROCEEDINGS

Reported by:

Sandra J. Mastay
Court Reporter

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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: 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

Gary Jablonski, Marketing Specialist

Clifford Carman, Marketing Specialist

Erin Taylor, 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
Kristine H. Reed, 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

On Behalf of National Milk Producers Federation:

BY: Roger Cryan, Ph.D.
2101 Wilson Boulevard
Suite 400
Arlington, VA 22201

On Behalf of O-AT-KA Milk Products Corp.:

Upstate Niagara Cooperative, Inc.
BY: Timothy R. Harner, General Counsel

On Behalf of Northwest Dairy Association:

Michael L. Brown
1130 Reinier Avenue
Seattle, WA

I N D E X O F W I T N E S S E S

I N D E X O F E X H I B I T S

P R O C E E D I N G S

JUDGE PALMER: On the record, my name is Victor Palmer. I am an administrative law judge. I have been assigned to hold the hearings in this Milk Marketing case, and this is the third session. The other sessions have been in Strongsville, Ohio, which is a suburb of Cleveland, and in Indianapolis, Indiana, and now we are here in Pittsburgh.

We have had some trouble completing all the work in the originally scheduled hearings. It has provoked quite a bit of attention from the industry, and understandably so.

We had set up some sort of a form of an agenda at the last session, which, unfortunately, because two attorneys who reside in New England are being delayed by weather today, we are not going to be able to keep to that agenda.

We went off the record, however, and we have come up with a couple of thoughts because we do want to end the hearing at this

session by Thursday, and to do this we can do a couple of things.

The first witness will be Sue Taylor, who I understand is fairly long. A client of Mr. Vetne's has indicated he would have no problem if she would be the first witness. Daniel Smith, who was starting with the first witness, is the one who is delayed. So we will just put his situation off a little bit.

So we are going to start with Sue Taylor. We have also decided that we are going to use fairly precise breaks from now on. We will go for 20 minutes each time, and we will announce the time we will expect everybody to be back in 20 minutes.

With that, I will now look to counsel.

MS. PICHELMAN: My name is Heather Pichelman. I'm with the U.S. Department of Agriculture, Office of the General Counsel in Washington, D.C.

At this time we have a few preliminary exhibits that we would ask to be

marked for identification. The first one, I believe we're starting at -- this will be No. 66.

JUDGE PALMER: 66.

MS. PICHELMAN: This is the Federal Register Notice regarding these proposed rules, the notice of reconvened public hearing on Proposed Rule Making, Volume 72, No. 88, dated Tuesday, May 8, 2007.

We would like to mark for identification Exhibit No. 66, the AMS News Release regarding this reconvening of the public hearing, and then we would like to mark for identification Exhibit No. 68. This is a Certificate of Officials Notified. It is signed by Joyce M. McPherson, a docket clerk, dated May 8, 2007.

Also included in this exhibit is a determination regarding mailing of the notice of hearing, and we have one signed by each market administrator that's covering all of the different marketing orders.

(Exhibit Nos. 66, 67 and 68 were marked for identification.)

JUDGE PALMER: Very good. What we should do is take appearances. We'll start with you. Would you give your name and identification for the record.

MS. PICHELMAN: I did, Your Honor.

JUDGE PALMER: All right. Do we have other appearances then? Let's take Mr. Beshore.

MR. BESHORE: Marvin Beshore, B-E-S-H-O-R-E. I am representing Dairy Farmers of America and the Dairy League Cooperative, Inc.

MR. HARNER: Tim Harner, H-A-R-N-E-R, representing Upstate Niagara Cooperative, Inc., and O-AT-KA Milk Products Cooperative, Inc.

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

JUDGE PALMER: Coming over to the middle here. Mr. Yale.

MR. YALE: Benjamin F. Yale, Yale Law Office, on behalf of Select Milk

Producers and Continental Dairy Products and Dairy Products of New Mexico.

JUDGE PALMER: Your table.

MS. REED: Kristine Reed, Yale Law Office, representing the same group.

MR. MILTNER: Bryan Miltner with Yale Law Office.

JUDGE PALMER: Anybody more in the middle? Okay. We'll go over to the right. Anybody else?

MR. ROWER: Jack Rower, AMS Dairy Programs. I am a marketing specialist.

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

JUDGE PALMER: Next table back. Anyone?

MS. TAYLOR: Erin Taylor, AMS Dairy Programs in D.C.

MR. JABLONSKI: Gary Jablonski, AMS Dairy Programs, Washington, D.C.

JUDGE PALMER: Anyone else?

MR. CARMAN: Clifford Carman, C-A-R-M-A-N, AMS Dairy Programs, Washington, D.C.

JUDGE PALMER: Any other appearances? All right. Well, that appears to be it. Let's start with Ms. Taylor.

SUE M. TAYLOR

a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ROSENBAUM:

Q. Why don't you state your full name for the record.

A. It is Sue Taylor.

Q. Ms. Taylor, have you prepared a written statement for your direct testimony here today?

A. Yes, I have.

MR. ROSENBAUM: Your Honor, I would ask this be marked as Exhibit 69.

JUDGE PALMER: I lost the numbers already. 69. So marked.

(Exhibit No. 69 was marked for identification.)

Q. Ms. Taylor, you can please read your statement for us.

A. Certainly. I am Sue Taylor, vice president of Dairy Policy and Procurement for Leprino Foods Company headquartered in Denver, Colorado. Our business address is 1830 West 38th Avenue, Denver, Colorado 80211. Leprino operates nine plants in the United States, manufacturing mozzarella cheese and whey products domestically and marketing our products both domestically and internationally. Six of the nine plants that Leprino operates in the United States receive milk pooled in the Federal Milk Marketing Orders; therefore, Leprino has a strong interest in the decision by USDA as a result of this hearing.

In my role as vice president of Dairy Policy and Procurement at Leprino Foods, I am responsible for developing the company's policy positions and advocating those positions in appropriate forums, such as this hearing. Additionally, I am responsible for market analysis and forecasting and raw milk procurement, among other things. I have represented the company at all Federal Milk Marketing Order and California Order hearings

that have related to cheese milk pricing over the last 12 years.

In addition to my current responsibilities at Leprino, I chair the Legislative and Economic Policy Committee for the National Cheese Institute, a constituent organization within the International Dairy Foods Association, and chair the Producer Relations Committee for the Dairy Institute of California. Both committees formulate the respective organizations' positions as they relate to milk pricing policy.

My professional responsibilities have focused on dairy markets and policies since 1989, when I joined Sorrento Cheese as a dairy economist and production analyst. From 1992 through 1994, I was a principal in a dairy economics and management consulting business, Dairy Management Concepts, which provided consulting services to a broad spectrum of dairy companies, most of which operate plants.

I have been at Leprino leading the dairy policy and procurement efforts since January 1995. My educational background

includes both Bachelor and Master's degrees from Cornell University in agricultural education with a heavy emphasis on agricultural economics.

This testimony is in support of adoption of Proposal Nos. 9 and 12. Proposal 9, submitted by IDFA, corrects the Class III protein formula to more accurately reflect the volume and value of whey cream that can be recovered from the production of cheddar cheese. Proposal 12, also submitted by IDFA, eliminates the three cents that is currently added to the 38 percent barrel cheese price before the calculation of the weighted average NASS cheese price that is currently used in the Class III formula.

This testimony also is in strong opposition to Proposals 6, 7 and 8 submitted by Dairy Producers of New Mexico. These proposals all increase the yield factors in the Class III and IV formulas based upon assumptions that do not comport with manufacturing realities.

We also strongly oppose Proposal 3, submitted by Dairy Producers of New Mexico,

which seeks to reduce the manufacturing allowances. This testimony also opposes the adoption of the proposals that narrow the survey base for the underlying commodities, (Proposals 13 and 15) and the National All-Jersey proposal that shifts the value of whey to the protein component (Proposal 16).

Finally, this testimony includes comments regarding the National Milk Producers Federation energy index proposal (17) and Dairylea's Proposal 20.

General Background on Cheddar Manufacturing. To understand the disposition and associated product yields of milk components through the cheddar manufacturing process, it is helpful to step back for a simplified overview of the cheddar manufacturing process.

Expert witness Dean Sommer of the University of Wisconsin and other NCI member company witnesses with years of direct cheddar production experience have elaborated more specifically on the process; but I am generally familiar with the process, and this explanation

provides a framework with which to understand the component losses that I will advocate must be considered in the Class III formula factors.

The cheddar manufacturing process starts with the pasteurization of milk and transmission of pasteurized milk to the cheese making vats. The pasteurizer is a closed loop system with limited potential for loss with the exception of at start-up and shutdown. During start-up and shutdown, milk components that are diluted with water (milk pushing water at start-up and water pushing milk at shutdown) are lost, generally to the floor drain where they are disposed of as waste.

Once in the vat, a series of steps occur that are critical to cheese making, such as introduction of starter culture, addition of coagulating enzymes such as rennet, and various setting, cooking, cutting and stirring cycles.

Not to diminish the importance of these steps in overall production, I will jump to the end of the vat cycle. After the gel formed in the vat is cut and further cooked, the liquid whey is drained from the vat and the

curds are pumped to another location (a table or conveyor, typically) for further draining. From this point, I will first describe the flow of the curds through cheese making and then will circle back to describe the flow of the liquid whey through further processing.

Curd Stream. Once the curds have been pumped from the vat to the next equipment, whether a draining table or belt, the whey that drains is recovered and it is typically combined with the whey that was drained from the vat.

The curds are then put through a cheddaring process during which the curds form a mat and acidity is developed to a targeted level. Whey is also expelled during the cheddaring process and is generally recovered and combined with the bulk whey that was drained from the vat. Once cheddaring is complete, the matted curd is milled into about half-inches pieces.

The milled curd is then dry salted. This may be done on a table or in other equipment. Regardless of equipment, the

osmotic pressure resulting from the salting of the curds will result in expulsion of additional whey from the curds. This whey is highly problematic because of its high salt content. This whey is collected but is typically not combined with the bulk whey from the vat or initial draining step. Most cheddar makers save the salt whey until the end of the production day and run it through the whey separator to recover as much fat as possible from it. However, the balance of the solids (which would include lactose, protein and the residual fat not separated) in the salt whey is not combined into the bulk whey stream because of their high salinity content. These solids represent a significant liability and may be disposed of through the waste systems or may be land applied if the cheese maker has a permit to do so. But they are not generally added back into the general whey stream and are lost in the waste stream.

After salting and stirring, the curds are ready to be transported into the block or barrel forms. During this final

filling and pressing process, further whey is removed. Depending upon the equipment and forms, the whey extracted through this process may or may not be recovered in a manner that allows for further use. For example, the whey from the pressing of cheddar in wooden forms cannot be recovered for human use. Wooden forms are commonly used in the production of 640s (which are sometimes then cut down and marketed as 40s). The AMS Instructions for Dairy Plant Surveys, and the title is Instructions, would be DA Instructions 918-PS found at USDA's Web site, it's Www.ams.usda.gov/dairy/918-ps.htm, state the following on page W-12.

"Number 4. Wooden Construction: These containers are usually knockdown type made of paraffin plywood panels and using painted iron angle-shaped frame and corners, held together and tensioned and clamped steel bands. Salty whey withdrawn by vacuum probing may be separated or desalted for human food use. All salty whey recovered through subsequent pressing or draining operations

shall be diverted to the floor or for uses other than human food."

Whey Stream. The bulk liquid whey that has been collected that is acceptable for the production of human grade whey is passed first through a fines saver to collect any curd that made its way through the screens. It is then generally passed through a centrifugal clarifier that separates out smaller pieces of cheese sometimes referred to as cheese dust. Most cheese makers add back to the cheese making process fines collected by the fine saver, but the fines collected at the clarifier are typically not approved for add-back and thus are lost. The AMS Instructions for Cheese Dairy Plant Surveys titled DA Instructions 918-PS found at the USDA Web site at www.ams.gov/dairy/918-ps.htm state the following on page B-2:

"Most modern high efficiency, automatic self-cleaning clarifiers and separators are not designed or constructed to permit the collection and recycling of the sludge ('shoot') for human food. The areas of

the machines that contact the sludge during the desluding operation are not designed or constructed as sanitary product contact surfaces. Some cream separators and centrifugal fine savers are designed to reclaim the heavy phase for use in human food."

The clarified whey stream is then sent through a separator. The whey separation process generates three product streams. They are whey cream, skim whey, and sludge. Most separators automatically expel the sludge buildup on a regular schedule and this product typically becomes part of the waste stream.

Prior to the final evaporation and drying of the skim whey, it is once again passed through a pasteurizer.

Cleaning Protocols. Proper cleaning and sanitation is critical to quality production of safe cheese and whey products. Cleaning of most equipment is done daily. Given the complexity of the manufacturing process already described and the wide array of equipment that comes into contact with the cheese and whey products at various stages of

the process, it should be no surprise that milk components adhere to the equipment and are only removed through the aggressive use of chemicals during the daily clean in place, also called CIP, cycles or through manual cleaning protocols.

Product Losses. Additionally, given the high level of automation of most modern cheese plants and the open systems through the process, it is inevitable that from time to time some product will contact a surface that results in it being removed from the human grade production. This is particularly true if a piece of equipment malfunctions, causing the balance of the production system to stop while that equipment malfunction is addressed.

While good manufacturing and preventative maintenance practices can minimize these instances of product losses, these events cannot be entirely eliminated. The magnitude of the component loss, of course, is significant when cheese curds that may be 32 percent fat and 24 percent casein become ineligible for human use. Unfortunately, milk

cannot be transformed into finished cheddar and whey products in one closed system. Given that reality, component and product losses must be considered when establishing appropriate yields for the purpose of setting minimum regulated milk prices.

Proposal 9. Proposal 9 corrects an error in the existing Class III formulas regarding the volume and value of whey cream. Prior to focusing on the proposal, I would like to review the assumptions embedded in the current formulas.

The current Class III protein component price formula is 1.383, which is the protein yield -- in other words, the pounds of cheddar cheese produced from one pound of protein -- times the quantity, the NASS cheese price, which will be the average cheddar cheese price received by manufacturers as surveyed by National Agricultural Statistics Service of USDA, minus 16.82 cents, which is the manufacturing allowance, the assumed cost to convert raw milk into one pound of cheddar cheese. That quantity plus -- actually, I

should clarify by the parens. It is 1.383 times (NASS cheese price minus the 16.82 cents) plus (1.572, which is the fat yield or the pound of cheddar cheese produced from one pound of fat times (NASS cheese price minus 16.82 cents, the make allowance) minus (.9 times the fat component price), and that .9 times the fat component price would be the credit for 90 percent of the payment for the fat component. At the entire result of that equation times 1.17, which is the ratio of fat to protein in milk.

The existing Class III formula captures the cheese yield value of milk in the portion of the protein --

Q. You mean fat. You said "milk," cheese yield value of milk.

A. Yes. That's correct. It should be the existing Class III formula captures the cheese yield value of fat in the portion of the protein formula factor 1.572 times the quantity NASS cheese price minus .1682 cents. Specifically, the 1.572 is the assumed cheese yield of a pound of fat and is based upon a

VanSlyke theoretical yield calculation in which the fat retention in the cheese is assumed to be 90 percent of the fat of the milk in the vat, the casein factor is zeroed out, and the moisture of the finished cheddar cheese is assumed to be 38 percent. The 1.572 yield factor reflects a combination of fat captured in the finished cheese along with a prorated portion of the non-fat non-casein solids and the water that are in finished cheddar cheese. A table dissecting the 1.572 fat yield factor is attached as Addendum A, Table 1.

I would like to turn to that table and describe it now.

Q. It is on page 35 of the report.

A. Okay. Addendum A, Table 1, found on page 35 of my testimony again is the dissection of the fat yield in cheddar calculation embodied in the current Class III formula.

The beginning farm fat level that is assumed in this calculation is 3.5 pounds, and that volume is reduced by an assumed farm to plant volume loss of one-quarter percent, which equates to a .0088 pound reduction. It is

further reduced by the fat lost on surfaces prior to receipt in plant, and that is a .015 pounds of fat.

So the assumed volume delivered to the plant from your original 3.5 pounds of farm fat measured at the farm is 3.4763 pounds. That entire volume of fat then is assumed to go into the vat with no pre-vat plant losses, and the current formula assumes 90 percent of the fat in the vat gets captured in the finished cheddar cheese. So the 3.4763 pounds of fat going into the vat times the 90 percent fat capture would be 3.1286 pounds of fat in a finished cheddar cheese.

Along with that, in the VanSlyke equation, there is a 1.09 factor enumerator which effectively captures value for other non-fat non-casein solids that are captured in the finished cheese. That 9 percent would equate to an additional .2816 pounds of solids.

So the combination of the fat in these other non-fat non-casein solids would total 3.4102 would be the combination of the 3.1286 and .2816.

Q. And that's pounds?

A. That would be pounds. The current formula assumes a finished cheddar cheese product moisture of 38 percent, which adds 2.0901 pounds of water to the assumption, and so the cheddar yield assumed from the original 3.5 pounds of fat measured at the farm would be 5.5003 pounds of cheddar cheese. That then gets divided by the original 3.5 pounds to drop down to the yield per pound farm fat of 1.572. I will now return to where I broke in my testimony, which is on page seven.

Including the cheese value of fat in the protein component formula in addition to charging for the fat separately in the butterfat component formula would result in valuing the same fat twice. Therefore, the protein formula also gives credit for a portion of the price paid for the butterfat component. This is accomplished through the subtraction of the .9 times the butterfat price in the protein equation. The .9 factor was adopted because the cheese yield factor of 1.572 assumes that 90 percent of the fat in the milk in the vat is

captured in the cheese. By subtracting only 90 percent of the fat component price, the formula leaves 10 percent of the fat valued at the levels of the fat component price. That is to say, the formula leaves 10 percent of the fat, 0.35 pounds at standard test, priced as if it was used to produce Grade AA butter.

This becomes obvious when the component --

Q. In your written testimony the word "price" is there, but that is actually superfluous?

A. That would be correct. This becomes obvious when the component price formulas related to the valuation of fat at the butter value are combined at the rates assumed in 3.5 percent standard milk. The following equations walk through that calculation.

The credit in protein formula per hundredweight milk at 3.5 percent standard fat would be a negative .9 times the Class III butterfat price per pound fat times 1.17 pounds of fat per pound protein times 3.1 pounds protein per hundred pounds of skim times

96.5 pounds skim per hundredweight of milk, which simplifies down to minus 0.9 times the Class III butterfat price times 3.5, which then simplifies down to minus 3.15 times the Class III butterfat price.

The charge for the fat component per hundredweight milk at 3.5 percent standard fat is 3.5 times the Class III butterfat price. So the combined fat component charge and credit in the protein price would be the 3.5 times the Class III butterfat price minus 3.15 times the Class III butterfat price, which would equal 0.35 times the Class III butterfat price.

The 3.5 pounds of fat that is valued at the Class III butterfat price in the Class III formula is valued as if it produced 0.42 pounds of Grade AA butter, that is 0.35 pounds fat times the 1.2 yield of Grade AA butter per pound fat in the Class III butterfat formula. Yet this fat was also assumed to have been delivered to the vat and been subjected to all of the fermentation and mechanical processes associated with cheddar cheese production. The assumption that butterfat, once subjected to

the cheese making process, can be used to produce Grade AA butter is inconsistent with USDA's own quality standards for Grade AA butter.

Specifically, the fat that is not captured in the cheddar cheese curd is drained from the cheese vat as part of the whey stream. After being passed through a fines safer and clarifier, the whey stream is passed through a separator. Upon separation from the skim whey, the whey fat is contained in a product referred to as whey cream. USDA's quality standards prohibit whey cream from being used to produce USDA Grade AA butter; rather, it can only be used to produce Grade B butter.

The Department's Agricultural Marketing Service Dairy Division publication entitled "United States Standards For Grades of Butter," Addendum B to my written testimony, describes the specifications for the USDA Grade AA butter on page two as follows:

"(a) U.S. Grade AA. U.S. Grade AA butter conforms to the following: Possesses a fine and highly pleasing butter flavor. May

possess a slight feed and a definite cooked flavor. For detailed specifications and classification of flavor characteristics, see Table 1, and for body, color and salt characteristics and disratings, see Table II."

The same page goes on to describe U.S. Grade B butter as follows:

"(c) U.S. Grade B. U.S. Grade B butter conforms to the following. Possesses a fairly pleasing butter flavor. May possess any of the following flavors to a slight degree: malty, musty, neutralizer, scorched, utensil, weed, and whey. For detailed specifications and classification of flavor characteristics, see Table 1, and for body, color, and salt characteristics and disratings see Table II."

The table referred to in these definitions, Table 1 on page 3 of the same USDA publication, specifically assigns whey butter with a whey flavor to Grade B status.

Q. I think you put the word "whey" in, assigns whey butter. Did you mean to say assigns butter?

A. That's correct. It should be

specifically assigns butter with a whey flavor to Grade B status. Whey flavor is inherent to whey cream. Therefore, butter produced from whey cream would be assigned a Grade B rating.

Whey Cream Value. Although whey cream is sometimes recycled back into the cheese making process, most cheddar makers do not do so. Agri-Mark, at transcript page 857, Twin County Dairy at transcript page 1411, Foremost Farms at transcript page 1542, Davisco at transcript page 1570, Great Lakes Cheese at transcript page 1919, and Land O'Lakes at transcript page 2115 have all testified at this hearing that they do not recycle whey cream into their cheddar. Kraft, the largest retail marketer of cheese in the U.S., has testified at this hearing that it does not allow its suppliers to do so, with respect to over 85 percent of the cheddar cheese it purchases, in transcript page 1102. Mr. Sommer of the University of Wisconsin Center for Dairy Research testified that Alto Dairy did not do so and that it was an unwise practice, transcript page 2350.

The recycling of whey cream in cheddar production is limited by quality concerns. Additionally, the risk of a buildup of bacteriophage is greatly increased with the recycling of whey cream. Bacteriophage are viruses that attack the bacteria cultures that are used to set the cheese curds. The buildup of bacteriophage can lead to poor vat sets and production of off-grade cheese which commands a considerably lower price than is reflected by the NASS survey.

For all of these reasons, many cheddar makers sell whey cream in bulk truckloads. Very few buyers of whey cream exist in the market today. With the acquisition of West Point Dairy Products by Grassland in 2005, one less independent market is available than was available at the time of the May 2000 hearing.

After canvassing cheese makers from throughout the country, I have been able to identify only six companies that represent a total of eight plant locations that purchase whey cream in the country. These six buyers

are Agri-Mark, West Springfield, Massachusetts; Beaver Meadows, DuBois, Pennsylvania; Grasslands in Greenwood, Wisconsin; West Point Nebraska in Hyrum, Utah; DFA in Winthrop, Minnesota; Alcam in Richland Center, Wisconsin; and Madison Farms Butter in St. Louis, Missouri. In addition to the reduced competition due to the limited number of players, the lack of local outlets drives up the cost of transporting the whey cream to market. This is particularly true in the east and the west. The cost of transport is either borne by the seller explicitly or indirectly through a lower purchase price.

The testimony that has and I understand will be entered into the hearing record by cheddar makers shows that the sales price for committed whey cream supplies is 94.4 percent of the Grade AA butter price in the Pacific Northwest and the flat (100.2 percent) Grade AA butter price in the Northeast. Pricing on spot loads is typically considerably less. The pricing in a whey cream transaction is applied only to the pounds of

fat in the whey cream; the skim portion of the whey cream is not valued. Ignoring the fact that the cheese maker does not receive payment for the protein and other solids in the whey cream for the moment, even a flat Grade AA market revenue stream falls short of the cheese maker's cost based upon the regulated Class III fat price.

Specifically, the revenue received by processors on the fat component of the whey cream at the 100.2 percent and 94.4 percent Grade AA multipliers generate a 12.5 cent and a 20.4 cent per pound shortfall per -- the extra "per pound" there could be deleted in the written testimony -- based upon the fat component cost established by the existing Class III formula. In other words, the regulated minimum price under the current formula is based upon the assumption that processors are receiving in the marketplace 12.5 cents in the Northeast and 20.4 cents in the Pacific Northwest more than they really are, with respect to the fat component of the whey cream. The following table, using a

five-year average Grade AA butter price, shows the details behind the conclusion.

In the Northeast at the five-year average Grade AA butter price, which is from the period of 2002 through 2006, the average price being $1.3592, applying the multiplier of 100.2 percent would generate a return per pound of whey fat of $1.3619. The regulated cost --

Q. Before you go on, just so the record is complete and clear, the multiplier of 100.2 percent is what processors are actually receiving for the whey cream in the marketplace; correct?

A. That would be correct. That would be the multiplier per pound of fat in the whey cream.

Q. Okay. And that's multiplied times the Grade AA butter price?

A. That would be correct.

Q. This is not part of the Federal Order System you are describing right now; this is the market reality?

A. That's correct. It has been testified to already in this hearing.

So the Northeast processor would have a return per pound of whey fat of $1.3619, but the regulated cost per pound of fat based on the current formula and those same butter prices would be $1.4868.

Q. And just to interject here, now we are talking about the Federal regulated price; correct?

A. That's correct.

Q. This is what the processor has to pay as a minimum price with respect to that fat in the whey cream; correct?

A. That's correct.

Q. All right.

A. That would leave a revenue shortfall for that Northeast processor of 12.49 cents per pound of fat sold as whey cream.

The other example shown in the table for the Pacific Northwest started with the same average butter price, which is a CME average butter price of $1.3592, to which a multiplier determined by the marketplace of 94.4 percent is set, that processor would get a return per pound of fat, of whey fat, of $1.2831.

They also would be subject to the regulated cost of $1.4868 per pound of whey fat and would be left with a shortfall of 20.37 cents per pound.

In addition, as already noted, this 20.4 cent per pound fat shortfall does not even reflect that the protein and other solids in the whey cream are not generating any explicit revenue whatsoever, given that the price paid for whey cream is based entirely upon its fat content. Yet the protein and other solids in the whey cream are being priced under the Class III formula.

The discounted values of whey cream and Grade B butter have long been recognized in regulation and in the marketplace. The California Class 4b price formula, which covers milk used to produce cheese in the state of California, has contained a whey cream factor since a unique cheese milk formula was first developed in August 1989. The formula originally used the CME Grade B butter price for the purpose of valuing whey cream. When the CME discontinued Grade B butter trading in

May 1998, the California Department of Food and Agriculture used the CME Grade AA butter price discounted by ten cents. The ten cent discount to the Grade B butter price is based upon a 1998 hearing record that focused on the historic price relationship between the Grade AA and B butter markets at the CME. Addendum A, Table 2 to this written testimony, summarizes the Grade AA and B prices for the 24 months immediately prior to the CME's discontinuation of trading. The Grade B price over that period was 9.78 cents below the average Grade AA butter price.

Q. And just to circle back, you have testified that whey cream, in fact, could only be used to make Grade B butter, not Grade AA butter under USDA standards; correct?

A. That's correct. Whether viewed from the perspective of the value of whey cream or the value of Grade B butter, it is clear that the whey fat recovered as whey cream is overvalued in the current Class III price formulas, which falsely value that fat as if it had the same value as the fat in Grade AA

butter. Therefore, there must be an adjustment in the protein formula to reflect that lower value. I will discuss a specific approach after I first discuss whey cream volume.

Whey Cream Volume. In addition to overvaluing the whey fat that is recovered in the form of whey cream, the existing Class III formula overstates the volume of fat that can be recovered as whey cream from cheddar production. The 0.35 pound assumption in the current formula ignores both the fat that is captured in dry whey rather than in whey cream, and the fat that is lost in the salt whey, sludge and cleaning solutions, which I have already discussed.

IDFA's Proposal 9 calls for the protein formula to be adjusted to reflect the volume of whey cream that is actually recovered in cheddar production. Based upon the evidence that I am aware of now, the following table summarizes the approach that I believe identifies that fat that is available for whey cream recovery.

I will describe this table in

detail. We're still starting with the standard milk composition assumption of 3.5 pounds of fat and using the existing .25 percent volume loss between the farm and the plant and the 0.15 fat loss due to fat cleaning on surfaces between the farm and the plant. That leaves us with a volume delivered to the plant of 3.4763 pounds.

The next section is also consistent with the current formula where we are using the volume delivered to the plant, 3.4763, multiplying it by the fat retention in the cheddar cheese of 90 percent to come up with 3.1286 pounds that is representing the fat captured in the cheddar cheese.

Lines 9 through 12 are not in the existing formula and it essentially calculates the fat that goes with the sweet whey. The dry whey per hundredweight yield assumption is 5.8643 pounds per hundredweight of milk, and the average fat composition of dry whey is roughly 1.25 percent. So the fat that goes with the dry whey is 0.0733 pounds, the 5.8643 times the 1.25 percent.

We are also going to calculate the fat left in the skimmed salt whey that's disposed of as waste. In this case, we have non-fat solids in the salt whey of .2172. The fat in proportion to the SNF in the dry whey would be 1.30. That's slightly different than the fat assumption on line 11 because there's some moisture in the fat assumption on line 11 that's been corrected to eliminate the moisture on line 15.

So the fat associated with the skimmed salt whey, in other words, the fat that gets disposed of as part of the waste in the salt whey, would be .0029 pounds. Taking then the 3.4763 pounds delivered to the plant less the 3.1286 pounds in cheddar, the 0.0733 pounds in the dry whey and the .0029 pounds in salt whey, we are left with a residual fat marketable as whey cream of .2715. Dividing that by the original farm fat of the 3.5, the percent of fat recoverable as whey cream would be 7.8 percent.

As the table shows, farm fat pounds are first reduced by farm to plant losses,

which are already captured in the current Class III formula. They are then reduced by the fat captured in the cheddar, which is already captured in the current Class III formula. They are then reduced by the fat that is incorporated in dry whey, which is 1.25 percent of the dry whey volume. This is not captured in the current Class III formula. They are then reduced by the fat associated with the skim portion of the salt whey that is disposed of due to salinity issues. This is not captured in the current Class III formula.

As the table shows, even without considering the loss of fats on the stainless piping and equipment from pasteurizer through the vat, draining, cheddaring, milling, and pressing, or the losses related to the product losses, the maximum residual fat available for whey cream is .2715 pounds of the original 3.5 pounds. This equates to 7.8 percent of the original fat.

Correcting the Protein Formula.

IDFA's Proposal 9 calls for the correction of the whey cream factor to account for both the

true volume of the fat recovered in the whey cream and the true value of whey cream. Based upon the above analysis, the maximum recoverable whey fat at a 90 percent vat capture rate in cheddar cheese is 7.8 percent of the original fat. Therefore, in this example, the 0.9 factor should be replaced by a factor of 0.922 or greater in the protein equation, leaving a maximum of 7.8 percent of the fat to be valued as whey cream. The effect of moving the 0.9 factor to 0.922 at the average fat component price of the last five years (restated to the February 2007 make allowances) of $1.4868 is a reduction of 11.45 cents per hundredweight milk.

While the adjustment above will correct the formula to account for the proper amount of recoverable whey cream, a further adjustment must be made to account for the true value of whey cream. The protein formula should include a factor for the difference between whey cream values and the Class III fat price. This should be done with a flat adjustment similar to the Agri-Mark methodology

in Proposal 10, but the adjustment should be reflective of the difference in value between the whey cream and the Grade AA butter value.

The analysis and discussion under the heading of whey cream value above indicates that the whey fat component that is recovered is overvalued by 12.5 cents in the Northeast and 20.4 cents per pound in the Pacific Northwest. Since the minimum regulated milk price is just that, an adjustment must be made to the protein component formula to accommodate the market values and, since we have uniform Class III pricing across the country, the targeted adjustment should be to accommodate the 20.4 cent shortfall in the Northwest.

Q. There should be the word "cent" after 20.4 in your written testimony?

A. That's correct.

Q. Okay.

A. This 20.4 cents per pound on the remaining .2715 pounds (7.8 percent of original fat) that we have determined is recoverable as whey cream, at a maximum, equates to a reduction of 5.5 cents per hundredweight. For

consistency, this adjustment should be effectuated in the fat value correction portion of the protein formula. Since there are 2.9915 pounds protein assumed in a hundredweight of milk and the fat correction portion of the formula is multiplied by 1.17, effectively grossing up the fat adjustment to 3.5 pounds of fat, the appropriate adjustment to the fat portion of the protein formula is 1.6 cents. The 1.6 cents multiplied by 1.17 and 2.9915 equates to the 5.5 cents per hundredweight that needs to be adjusted.

Q. Just how do you get to the 1.6 cents? Can you just explain that?

A. Essentially, it is taking the 5.5 cents that I have determined out of a hundredweight basis, it needs to be adjusted out, and putting it in terms that can be used inside that protein equation, recognizing that there is roughly 2.9915 pounds of protein that will be multiplied by the 1.17 factor that grosses it back up to the 3.5 pounds of fat.

Given this evidence, I propose that the protein formula become 1.383 times (NASS

cheese price minus 16.82 cents) plus (1.572 times (NASS cheese price minus 16.82 cents) minus (.922 times fat component price) minus 0.016 or, in other words, 1.6 cents) times 1.17.

I will note again that this is a conservative change. The proposed change does not account for the fat lost on the stainless piping and equipment from pasteurizer through the vat, draining, cheddaring, milling, and pressing, or the losses related to product losses. In other words, the formula will still require processors to pay for milk as if they had not suffered these losses, but were instead able to extract revenues from the marketplace for this fat.

The combined effect of the correction for volume and value of whey cream is a reduction in the Class III hundredweight price of 16.9 cents per hundredweight over the last five years.

Q. Let me just interrupt here to add one point of clarification. You set forth on page 16 your proposal for the protein formula.

That includes in a couple of places the make allowance of 16.82 cents; correct?

A. Yes.

Q. But you're not endorsing that as the correct make allowance, are you?

A. That would be correct. It is the -- probably I should have stated it as less the make allowance rather than put in the precise number.

Q. There has been other testimony as to why the make allowance should be increased, and you are in agreement with that testimony, I take it?

A. I am in agreement, yes.

Q. Please continue.

A. Proposal 12. USDA should also adopt IDFA's proposal to eliminate the 3 cents that is currently added to the barrel price before calculating the weighted average NASS cheese price used in the Class III formula. Under the current pricing formulas and make allowances, this 3 cents addition cannot be justified.

At the time the current 3 cent adjustment was adopted as part of the Final

Rule under Federal Order Reform, it was stated that "Since the make allowance of 17.02 cents is for block cheese, the barrel cheese price must be adjusted to account for the difference in cost for making block versus barrel cheese. The 3 cents that is added to the barrel cheese price is generally considered to be the industry standard cost difference between processing barrel cheese and processing block cheese." And that quote is found at the Federal Register, Volume 64, No. 63, page 16098.

Subsequent to the adoption of this 3-cent adjustment, two significant developments have occurred. First, the manufacturing cost data presented by Dr. Mark Stephenson of Cornell University at the September 2006 hearing which was used to set the make allowances that went into effect February 1, 2007, included both blocks and barrels. While CDFA cost data was also used to set the current Federal Order make allowances, Dr. Stephenson's cost data covered 78 percent of the total production volume and was given that relative

weight in establishing the make allowances. Therefore, the current make allowances already reflect any processing cost difference that may exist between 40-pound blocks and 500-pound barrels. To make an additional 3 cent adjustment to reflect the purported processing cost difference is double counting.

Second, the 3-cent addition was not based upon a study of actual cost differences between blocks and barrels. Rather, it was based upon what was "generally considered to be the industry standard cost difference between processing barrel cheese and processing block cheese" as noted above. And the 3-cent rule of thumb was accepted by the industry as the cost difference because it had been manifested in the marketplace as the long-term difference in prices between 40-pound blocks and 500-pound barrels at 39 percent moisture.

However, subsequent to the implementation under Federal Order Reform, USDA adopted in the tentative rule implemented January 2001 a change in the pricing reference used for barrel cheese from the 39 percent

moisture price that set the framework for the 3-cent adjustment to a 38 percent moisture adjusted price. This change in the moisture level at which barrel prices are quoted has increased the barrel cheese price by 2.2 cents per pound during the last five years. Thus, the 3-cent adjustment and the adjustment of the barrel price to a 38 percent price reference both capture the same facet of the relationship between blocks and barrels, and are duplicative and double counting.

And finally, evidence has been presented at this hearing by Jon Davis with respect to block and barrel production costs in a Davisco plant that has comparable capacity in both forms, with capital investments to both lines made in a comparable timeframe, which showed no difference in cost between the production of cheddar blocks and barrels.

For all of these reasons, the 3-cent adjustment should be eliminated from the formula. At the average barrel representation in the NASS cheese survey over the last five years of 56.15 percent, the elimination of the

3-cent barrel adjustment equates to a reduction of 16.24 cents per hundredweight.

Opposition to Other Proposals.

Opposition to Proposals 6, 7, 8, which are the Dairy Producers of New Mexico yield proposals. Leprino Foods is strenuously opposed to the yield proposals submitted by Dairy Producers of New Mexico. These proposals all increase the yield factors in the Class III and IV formulas based upon assumptions that do not comport with the minimum regulated pricing and manufacturing realities.

The erroneous assumptions that have been used by the proponents of the proposals are that, one, structural changes in the farm sector have eliminated the need to accommodate farm-to-plant losses when determining yields; two, 94 percent of the fat is captured in the finished cheddar cheese; and, three, casein represents 83.25 percent of true protein.

The only witness representing Dairy Producers of New Mexico, et al., through the first two weeks of the hearing who has addressed these specific proposals has been

Attorney Benjamin Yale. In addition to the above underlying assumptions, Mr. Yale relies on other erroneous analysis to argue for the adoption of these yield proposals.

Fat Yield. I have to confess some confusion about Proposal 6 put forth by the Dairy Producers of New Mexico. The noticed proposal would increase the fat retention assumption in the cheddar yield formula from 90 to 94 percent. It would make a corresponding adjustment to the fat credit in the protein formula to provide credit for that 94 percent of the fat that it proposes to value at the cheddar value that is also valued at the butter value as the fat component. The yield factor of 1.653 pounds of cheddar per pound fat -- the word "fat" should be inserted there in the written copy. It should read the yield factor of 1.653 pounds cheddar per pound fat found in the Proposal 6 Order language also reflects elimination of the farm to plant loss. Additionally, Mr. Yale in his testimony (Exhibit 32, page 17), indicated that he was amending Proposal 6 as follows:

"The 0.90 in the protein formula should be replaced with 0.894 to be consistent with the calculation for 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 protein."

Since the 0.90 factor is not proposed to be retained in Proposal 6, it is difficult to clearly understand what the amended proposal is. Therefore, I will separate the proposal into three pieces. These are (1) the elimination of the farm to plant shrink allowance, (2) the increase in the fat retention assumption from the current 90 percent retention to 94 percent, and (3) the concept that I believe is embodied in the amended proposal that attempts to recapture the farm to plant shrink allowance by reducing the credit for the volume of fat paid at the butter value.

Opposition to elimination of the farm to plant shrink allowance. Eliminating the farm to plant shrink allowance is in direct

conflict with the combination of three basic facts. They are, (1) the Orders set minimum prices for milk as measured at the farm; (2) shrink occurs between the farm and delivery to the milk silos at the manufacturing plants; and (3) the VanSlyke yield formula used as the basis for setting the yield factors is designed to estimate the cheddar yield based upon components present in a cheese vat. In other words, the VanSlyke formula does not account for the losses of components that occur in the collection, transport, and delivery of milk between the farm and the plant. Therefore, further adjustments must be made to accommodate losses that occur prior to the vat when pricing milk at the farm.

The losses of milk volume and components that occur between the farm bulk tank and the plant have been well documented in this hearing already. MMPA testified that their losses average around .3 percent, transcript page 469. Land O'Lakes experienced 0.343 farm to plant loss. I believe that that would be .343 percent farm to plant loss by

volume, and .511 farm to plant loss on the fat component in 2006. That's found at transcript 2155.

Q. Should there be a percentage after the 0.511?

A. I believe so. I would need to go back to the actual transcript cite to verify. Leprino Foods applies significant resources to managing farm to plant losses, but we still have some plants that persistently experience losses in the realm of a quarter percent. Despite our efforts, several of our plants experience average annual fat losses exceeding the 0.15 pounds per hundredweight milk farm to plant loss that is assumed in the existing yield formulas.

Q. I'm not sure you read the number right. 0.015?

A. Yes, 0.015 pounds per hundredweight. Mr. Yale contends that changes in farm structure have remedied the historic farm to plant losses that necessitated the allowance that is currently embodied in the Class III and IV yield assumptions. This is simply not the

case. Federal Orders set minimum regulated prices in many milksheds where the supply is still dominated by small dairies. Our Waverly, New York, facility receives routes on a routine basis that are filled across 15 to 18 stops per load. The potential error in measurements, and the losses that are inherent in transferring the milk from the farm bulk tank to the truck, are all magnified by these multiple stops. It would be inappropriate for the Federal Orders to adopt a proposal that is inconsistent with these structural realities.

Even many large dairies generate meaningful farm to plant losses. Although some large dairies use certified scales for their milk, many do not, even if they're shipping truckload quantities. Some of these dairies have bulk tank capacity that exceeds the capacity of a tank truck. In these cases, the driver measures the milk by site tube or stick both before and after filling the truck. The addition of another subjective measurement and the math that is associated with it creates another opportunity for error. Although our

average weight losses in milksheds with large dairies is lower than in those milksheds with small dairies, the size of a dairy does not seem to impact the fat losses we experience. As Mr. Yale elaborated at transcript page 1287, these differences may be generated by poor agitation prior to sampling at the farm. The challenge of getting a bulk truck driver to wait the time required to get the farm tank adequately agitated prior to sampling is no less with a large farm pick-up than a small farm pick-up.

Farm to plant losses remain a significant issue that even when aggressively managed exist in the marketplace today. To set a minimum regulated price based upon farm weights and tests in combination with yield assumptions based upon milk in a cheese vat without acknowledging realistic weights and tests would be bad policy. That should be -- there should be the word "loss" inserted there after test. So without acknowledging realistic weights and tests losses would be bad policy. The Department was correct in their

acknowledgment of these losses in the existing yield factors.

Opposition to Increasing the Fat Retention Factor From 90 to 94 Percent. The proponents of increasing the fat capture rate from 90 to 94 percent have provided no supporting evidence. Rather, the proponents provided hypothetical examples that I have yet to confirm are mathematically sound as to what the monetary impacts would be if a plant were to be able to achieve 94 percent fat capture. Such hypotheticals do not prove that their underlying assumptions are realistic or achievable.

Mr. Yale, in an effort to support the proposals to increase the yields in the Class III formula, attempts to estimate the yields achieved in California based upon the released CDFA cost study data, Exhibit 32, page 37. This analysis is riddled with erroneous assumptions and errors. First of all, Mr. Yale assumes that the standard of identity for cheddar cheese restricts inputs to milk, cream or skim milk. FDA has issued an

advisory letter requiring liquid ultrafiltered, or UF, milk to be used in cheddar cheese production. CDFA hearing testimony has documented the use of UF milk in cheddar plants in California. Because the protein in the UF milk would typically be concentrated to three times the concentration in raw milk but the lactose remains at roughly the level of raw milk, the protein to SNF, or solids not fat, ratio in UF milk is very different than that in raw milk. Without knowing the protein composition in the vat, no conclusions can be drawn from the CDFA yield data.

In addition, Mr. Yale references the CDFA Class 4b assumption that 0.27 pounds of whey butter is produced and implies that it is reflective of a 92.67 percent fat capture rate in cheddar cheese. This is an error in three ways. First, Mr. Yale assumes 3.68 pounds beginning fat per hundredweight whereas the CDFA formula states explicitly that it is premised on 3.72 pounds milk fat per hundredweight. Secondly, Mr. Yale does not translate the whey butter yield to the pounds

of fat used to produce that butter. At the 82 percent fat content assumed in the USDA formulas, the .27 pounds of whey fat would be generated from .22 pounds of fat. But most importantly --

Actually, I should make a correction in that sentence. The .27 pounds of whey, instead of fat that should be butter. So the sentence should read, At the 82 percent fat content assumed in the USDA formulas, the .27 pounds of whey butter would be generated from .22 pounds of fat.

But most importantly, a portion of the fat that is not accounted for in the whey butter assumption may be assumed by the state to have been lost in the manufacturing process. Therefore, there is no basis for the conclusions drawn by Mr. Yale on this point.

In contrast, expert witness Dean Sommer was very clear that 90 percent remains an appropriate fat capture assumption. He testified that extensive multi-year studies conducted at the Alto Black Creek and Waupun plants showed fat captures ranging seasonally

from 89 to 91 percent (transcript page 2339). He was also able to rely upon his extensive exposure to other plant operations given his current position as a Cheese and Food Technologist at the University of Wisconsin Center for Dairy Research. He elaborated that it is important to measure the fat in the finished cheese, as opposed to assuming that all of the fat that is not in the whey at draw is in the finished cheese. The sources of loss outside of the vat include the milk silos (transcript 2340), clarifiers (transcript 2341), start-up/change-overs/shut down (transcript 2341), cheese fines (transcript 2342), salt whey (transcript 2344), and equipment surfaces (transcript 2344).

Mr. Sommer's conclusion that 90 percent remains an appropriate assumption for the percentage of fat captures in the cheese (transcript 2339) was confirmed by the testimony of cheddar plant operators regarding their own operating experiences, including Timothy Greenway, Foremost Marshfield, 90.25 percent, in his testimony found at

transcript 1528; Dennis Shad, Land O'Lakes at the Kiel plant, Hearing Exhibit 55, pages three to four; and Jon Davis, Davisco, 90 to 90.5 percent, found at transcript page 1591.

Opposition to setting the fat credit in the protein formula at a level below the fat capture factor embodied in the cheddar yield factor. The proposed amendment to set the fat credit rate in the protein formula below the fat capture rate in the cheddar yield formula should be rejected. In setting it at a lower rate, the effect is to value some volume of fat twice. For example, if 90 percent of the fat is priced in the formula at the cheddar value, then it is necessary to ensure that it is not also priced at the butter value. Since Class III fat is priced at the butter value, a credit for the price must be incorporated in the protein formula. This concept holds whether or not a farm to plant loss has been incorporated in the yield equation.

The following table shows how the fat would be accounted for if, as Mr. Yale proposes, the fat credit in the protein formula

is reduced to 89.4 percent to reflect the fat capture in cheddar after the farm to plant losses are considered. The beginning farm fat level is 3.5 percent, but through the combination of farm to plant loss, the fat priced at the cheddar value, and the fat priced at the butter value, a total of 3.5209 pounds of fat per hundredweight would be accounted for and subjected to a minimum price. In other words, Mr. Yale's proposal would account for and price 0.0209 more pounds of fat than is actually contained in the original farm milk. This is clearly not sound policy.

I include in my testimony a table that starts with the farm composition of 3.5 pounds and accounts for .0088 pounds in the farm to plant loss allowance, the 0.15 pounds of fat in the fat that's lost due to cling to surfaces between the farm and the plant. Then in terms of the fat that's captured in the curd, a number that we have seen before, the 3.1286 pounds of fat, and that's the fat delivered to the vat times the 90 percent capture rate. Then finally, using his

89.4 percent fat credit at the butter value, it comes down to .3685 pounds of fat that's valued at the butter value, showing that the total accounted for under that proposal would be the 3.5209.

Correction of butterfat component yield to 1.211. One point that I believe Mr. Yale is correct on is that the existing application of loss assumptions in the fat component formula is inconsistent with the application of the loss assumptions for the other components. Specifically, I believe that the fat losses in butter were intended to be calculated as follows, and I have a table showing the calculation with two columns. The current column starts with one pound of fat at the farm and applies the quarter percent loss to that pound of fat, but then, rather than applying the 0.15 pounds of fat that's lost in the farm to plant churn on a per hundredweight basis it applies it per pound and that is how it is applied to the existing formula, and so that drops us down to a volume delivered to the plant of .9825 pounds, and taking that and

blowing it out with the yield factor that's based on a fat composition and butter assumption of 82 percent, we come up with 1.198, which I believe is the premise of the 1.2 in the current formula, whereas in the rightmost column I have an approach which would be consistent with other components' approach which starts with a 3.5 pounds, still applies the quarter percent volume loss, but applies the 0.15 pound loss due to cling again to the full volume of 3.5 pounds. Using the same yield assumptions it comes up with the same 1.211 yield factor that Mr. Yale came up with.

The current factor was premised upon 0.015 pounds loss per pound fat rather than per hundred pounds of milk.

JUDGE PALMER: Excuse me for a second.

(Interruption in the proceedings.)

A. Having clarified this point, I will stop short of endorsing the Yale proposal to increase the butter yield assumption because I believe that in-plant losses due to fat

clinging to stainless are inevitable in butter production, in the same way as they are inherent to the cheese manufacturing process. Therefore, rather than endorse the proposal to increase the butter yield, I urge USDA to reflect realistic in-plant losses in both the Class III and Class IV formulas.

Opposition to increasing the cheddar yield of protein factor from 1.383 to 1.405. Leprino strongly opposes an increase in the protein yield factor from 1.383 to 1.405. This proposal is erroneously premised on an argument that the percentage of casein in true protein in milk is 83.25 percent. However, the 83.25 percent suggested by the proponents is not based upon actual tests of casein levels in raw milk. Rather, it is an estimate based upon several rules of thumb, each of which is inaccurate and introduces additional errors.

Obviously, the best way to determine the proper assumption for the percentage of casein in true protein in milk is to measure it. That is, laboratory tests should be performed on the milk and the casein percentage

in the true protein should be determined.

Due to the complexity of casein testing, this direct testing is not done routinely in the dairy industry. However, several university studies of this matter have been completed over the years by experts in milk chemistry, and they provided the basis for the current formulas, which are based upon the percentage of casein in true protein being 82.2 percent. There's no reason whatsoever to change this number.

Specifically, one of those university experts who performed these studies is Dr. David Barbano. He testified at the May 2000 Class III and IV formula hearing and specifically addressed this issue.

JUDGE PALMER: Excuse me. How are you doing? You have been reading for a long, long time. Do you want a break or do you want to keep going?

MS. TAYLOR: Why don't I complete this section and then perhaps we can take a quick break.

JUDGE PALMER: Go ahead.

Thank you.

A. Dr. Barbano indicated that the 82.2 percent casein in true protein is reflective of milk he had studied.

That conclusion was based upon data presented by Dr. Barbano at the 1999 Cornell Nutrition Conference for Feed Manufacturers entitled "Trends in Milk Composition and Analysis in New York," the relevant tables of which are Addendum C to my testimony. Table 2 shows casein as a percent of true protein on the fifth line of numbers from Dr. Barbano's 1984 study of milk from 50 cheese plants across the country. On an annual average basis, casein comprised 81.95 percent true protein. Table 8 provides casein as a percentage of true protein for milk that Dr. Barbano studied from three large cheese factories in New York State from 1992 to 1998. The number ranged on an annual average basis from 82.12 percent to 82.42 percent, and the seven-year average was 82.22 percent.

To the best of my knowledge, this data was then, and remains today, the most

complete and accurate data available measuring casein as a percent of true protein. As a dairy economist, I believe it represents the best data available to USDA upon which to base this aspect of the minimum milk pricing formulas.

This kind of actual laboratory testing of milk to determine composition is clearly far superior to the estimation method using rules of thumb that is used by the proponent of Proposal 8. The Yale rules of thumb include the assumption that casein as a percentage of crude protein is 78 percent, and that there is .19 non-protein nitrogen in crude protein. Yale Exhibit 33, page DDD, and testimony transcript page 2224 to 2225. But the Barbano studies showed that both assumptions are not quite correct. Table 6 shows that non-protein nitrogen varies year to year from .187 to .196 and averages .192, and Table 9 shows that casein as a percentage of crude protein averaged 77.19 percent over the seven-year study period.

This only confirms that the simplest

and most logical approach to take in setting a pricing formula based in part on the percent casein in true protein is to actually measure that percent, which is exactly what USDA has done and should continue to do. The .822 factor should not be changed.

MR. ROSENBAUM: Shall we take a break now, Your Honor?

JUDGE PALMER: Yes, we'll take a break, and we will take it for 20 minutes. So it is now actually 1:30. So we will be back ten of.

MR. ROSENBAUM: 2:30.

JUDGE PALMER: Did I say 1:30? I meant 2:30.

(Recess taken.)

JUDGE PALMER: Back on the record. We were at page 28 of the statement, also referred to as Exhibit 69.

MS. TAYLOR: Prior to starting back in the statement I would like to make one clarification.

JUDGE PALMER: Sure.

MS. TAYLOR: It wasn't

contained in my written comments, but on page 12, as I went through the table at the top, I commented that the average Grade AA butter price that was used in that table was the CME price. In fact, it was the NASS price. Now I will resume my testimony on page 28.

Opposition to Proposal 3 (Dairy Producers of New Mexico make allowance proposal). We also strongly oppose Proposal 3, submitted by Dairy Producers of New Mexico, which seeks to reduce the manufacturing allowances. Our position on make allowances has been elaborated at length in our testimony and comments associated with the 2006 hearing and have not changed. There is simply no basis for reducing those make allowances as Proposal 3 suggests.

Opposition to Proposal 13 and 15 (DFA and Dairy Producers of New Mexico's proposals to narrow the cheddar price series). Leprino opposes the adoption of the proposals that narrow the price survey base for the commodity prices that are used in the Class III and IV formulas.

We understand that support for proposal 13, submitted by Dairy Farmers of America and Northwest Dairy Association, has been withdrawn by the proponents. However, since it was a noticed proposal, I believe it is important to articulate, at least in a cursory way, our concerns about it. The proposal calls for the narrowing of the price survey used to establish the cheddar price used in the Class III protein formula by eliminating the cheddar barrel price.

We support the inclusion of barrel cheddar in addition to blocks because of the additional volume that is captured. We generally believe that greater volume improves the survey as a price discovery mechanism. However, if the complexity of including the cheddar barrel price results in erroneous inflation of the cheddar price through the use of an add-on in combination with adjusting the barrel survey price upward from a 39 percent moisture price, elimination of the barrel prices from the formulas is preferable. The elimination of the 3 cent barrel add-on, as

proposed by IDFA in this proceeding, will address our concern and will remove the need to eliminate barrels from the price series.

Opposition to Proposal 16 (National All-Jersey reallocation of other solids value proposal). Although we applaud National All-Jersey's efforts to think outside the box with Proposal 16, we oppose it due to the distortions that will result across components. Specifically, the proposal shifts the value from a product whose yield is driven largely by one component, lactose and other solids, to a different component, protein. Since the lactose variability in milk is much lower than the protein variability in milk, this transfer will not equate with manufacturing economics at certain milk component levels. Additionally, the proposal transfers revenue between breeds in a way that is not fully justified.

I should clarify -- this is not in my written statement -- that although the effect is this transfer across breeds, it also has the effect of transferring revenue within breeds. The real effect is being driven by the

shift of a product to a component whose yield does not relate directly to that product, specifically protein.

Comments on Proposal 17 (National Milk Producers Federation energy index proposal). Our primary concern with National Milk Producers Federation's energy indexing proposal is the potential impact on futures liquidity. Risk management tools are vitally important to our customers, and we oppose proposals that threaten their liquidity. Liquidity depends upon attracting a sufficient number of participants on both the purchase and sales side of futures contracts. The unpredictability that would be added by the addition of an automatic energy cost adjustor to the Class formulas would increase the riskiness of futures contracts and decrease participation in the sale and purchase of those contracts. We believe that the increased basis risk that will result from adoption of Proposal 17 would reduce both customer and speculator liquidity. Both are critical to maintaining successful risk management tools.

JUDGE PALMER: Have we had any testimony about the use of futures markets in respect to cheese makers at all? I wonder if she wants to explain that. We may have some directive so that --

MR. ROSENBAUM: Dr. Yonkers I know covered this in his testimony as well.

JUDGE PALMER: And you feel satisfied that it has been covered?

MR. ROSENBAUM: I think we're satisfied.

JUDGE PALMER: All right. Fine. Go on.

A. Comments on Proposal 20 (Dairylea Proposal). We applaud Dairylea for thinking outside the box relative to the circularity conundrum in the current Class III formula. However, because the proposal would leave minimum milk price formulas unchanged regardless of increases in manufacturing costs, it would make it impossible for federally regulated handlers to obtain the revenues necessary to pay for those costs, unless they were able, acting individually, to convince

their customers to pay those cost increases through a price premium.

However, it is difficult to believe that it is possible to extract the premium from the marketplace when alternative sources of product exist on the CME or in unregulated areas. Furthermore, if unregulated or state regulated cheese makers did also extract the additional premium from their customers, they would have no incentive to list it separately on their invoices or report it separately, as Proposal 20 would require, in order for the premium to be excluded from the calculation of the product price for purposes of setting the regulated minimum milk price. In fact, unregulated or state regulated cheese makers would in all likelihood choose to disadvantage their competitors by reporting the higher price as part of the NASS survey, which would under the Federal Order, Federal Milk Order formulas, immediately translate into a higher regulated minimum milk price applicable to their federally regulated competitors.

Proposal 20 would be an experiment

whose success would be quite unlikely and whose failure would have profoundly negative impacts on federally regulated handlers and ultimately their suppliers.

Comments on Dairy Producers of New Mexico Impact Estimates. In attempting to justify his various proposals on behalf of the Dairy Producers of New Mexico, et al., Mr. Yale presented analyses that he contended showed that the changes in the Class III and IV price formulas made since 2001 reduced producer income by, on average, $13,245 per producer. While I have already pointed out the various flaws in Mr. Yale's proposals, I feel it important also to show the errors in Mr. Yale's economic analyses.

Mr. Yale's analyses incorporate two major errors. The first is in the calculation of the baseline Class III price using the 2001 formula. The second is in the calculation of the pool value at test.

The error in the Class III formula resides in the protein price calculation under the "changed" column. Specifically, Mr. Yale's

calculation on Table KK of Exhibit 33 provides credit for only 90 percent of the Class III fat price. However, the 2001 formula, as it existed and is represented on Table D in Exhibit 33, credited the entire Class III fat price. The impact of the error in Mr. Yale's formula is that the protein price is overstated by 17.18 cents per pound protein on Table KK of Exhibit 33, and the Class III price at -- that should be "at test" on the written statement instead of "at Class," is overstated by 51 cents per hundredweight milk in the baseline period.

An additional error was incorporated into Mr. Yale's analysis through his incorrect methodology to calculate the Class prices at test. Although I have not been able to replicate his calculations, it is clear from looking at the formulas that he lays out (Exhibit 32, page 12) that his calculation erroneously multiplies the protein value, in the case of Class III, by the skim percentage in Class III and the SNF value, in Class IV, by the skim percentage in Class IV. Presumably,

the skim percentage multiplier was borrowed by Mr. Yale from the methodology used to calculate the 3.5 percent standardized price based upon the price of 100 pounds of skim. In this situation, the 96.5 percent factor is used to reflect that 100 pounds of milk with 3.5 pounds fat can only contain 96.5 pounds of skim. But the calculation at test should be based upon the actual pounds of each component multiplied by the respective component price for that component. That is how minimum milk prices paid into the pool are actually established. Mr. Yale's failure to use actual Class prices means that this analysis of minimum milk prices only reflects 96.31 percent of the Class III protein value at test, and 94.79 percent of the Class IV SNF at test.

I have recalculated Table KK using the same methodology as was used by Mr. Yale with the exception of correcting the errors noted. I have also added some detail for clarity. My analysis shows that Mr. Yale's conclusion that producers had lost 56 cents of their revenue stream through regulated milk

price formula changes since 2001 is grossly overstated; the impact of the regulatory changes using his methodology with the correct price formulas is a reduction of 17 cents per hundredweight milk. This analysis is attached as Addendum D.

Additionally, I have observed that because of the complexity of changes that have occurred in the Class III formula, the impact of those changes varies dramatically by market condition. For example, replicating the same analysis using 2004 market prices shows that producers would have received more in 2004 under the current price formulas than they did under the 2001 formulas. That analysis is attached as Addendum E.

The same errors in the methodology to calculate milk prices at test and estimate the planned impact are made in Tables LL, OO, AAA, BBB, EEE, TTT, VVV, WWW, ZZZ, AAAA, DDDD, EEEE in Exhibit 33.

Q. Ms. Taylor, before we move on, why don't we look at Addendum E just briefly so you can help explain a little bit what you did.

Actually, why don't we look at both D and E, which are back to back.

Starting with Addendum E, that is your reproduction of Mr. Yale's analysis from Exhibit 33, Table KK, but using the correct assumptions as to what the 2001 formula actually provided and also the correct methodology for calculating what the actual minimum price is; is that right?

A. That's correct.

Q. And that shows that the decline is only 17 cents, not the 56 cent decline that Mr. Yale calculated; is that correct?

A. That would be correct.

Q. And then Addendum E is you took things a step further and looked to compare what the impact of the 2001 formulas versus the current formulas were if one used 2004 market scenarios -- the actual market prices as they existed in 2004; is that correct?

A. That is correct.

Q. And the bottom line is the last one, value per producer, correct, where you show that under the current formula the value per

producer is $357,100; is that correct?

A. That's correct.

Q. Versus under -- if the 2001 formula had been in effect, the value would have been about $3,000 less; correct?

A. I believe it would be --

Q. Or is that $300?

A. $300 greater under the current formula than under the formula that existed in 2001, yes.

Q. The point here is that the changes in formulas from 2001 to today have not resulted in substantial declines in producer revenues; is that right?

A. That would be correct.

Q. And, in fact, for some years it would be an increase in producer revenues; correct?

A. That would be correct.

Q. That is what Addendum E is all about?

A. Yes.

Q. Why don't you continue back to page 32 of your testimony, please.

A. Comments on Dairy Producers of New Mexico contention that producers are paying for higher yields at plants through the make allowance. Mr. Yale erroneously assumes that the yield assumed in the Class III formula is impacting the underlying cost studies that are considered in setting the make allowances (Exhibit 32, page 29). He implies that the total plant costs determined in the cost surveys are divided by the yield factors in the formulas which he believes underrepresent actual yields. Taken in combination, dividing plant costs by a low yield, he contends, results in a higher make allowance.

In fact, the yields used in the Class III formula are not used to translate total plant costs into costs per pound. Rather, the actual yields of the plants are used in that process. Therefore, Mr. Yale's argument is without merit.

Other Conceptual Observations. The adoption of end-product pricing in January 2000 has certainly shifted the discussion to a technical arena regarding manufacturing costs

and yields. This change has created a new focal point for the discussion of the equitable sharing of revenue between producers and processors. Mr. Yale even observed that the "determinative factor in the cost to make cheese and other dairy products" --

Let me start that quote again. 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." From hearing Exhibit 32, page three.

Other witnesses have suggested an inequity between producers and processors because they contend that processors have a guaranteed cost of production coverage through the make allowance and producers' cost of production is not reflected in the pricing system.

Although I share the misgiving with Mr. Yale that we no longer have a sufficient pool of milk that is untouched by minimum pricing to establish a competitive pay price series that would eliminate the need to get

into the technical minutia associated with end-product price formulas, I am concerned that some participants in this proceeding and many dairymen have lost the broader perspective on the end-product price formulas.

End-product prices do reflect the intersection of farm level economics with demand, because the commodity prices that are part of the pricing formulas reflect supply and demand. Using current price formulas, the gross product value (before being reduced by make allowances) of Class III milk has moved in an $11.48 range during the period since January 2000. The gross product value (before being reduced by make allowances) of Class IV milk has moved in a $6.62 range during the period since January 2000. Although end-product demand has been part of this equation, this price volatility has primarily been driven by raw milk supply issues. It is through these marketplace responses to supply and demand situations that producers garner a revenue stream that sustains their economic viability. Squeezing processors by another 20 or 40 cent

per hundredweight through too small make allowances, too large yield factors or price surveys that overvalue finished products in parts of the country is not what will keep the producer sector healthy.

But too large yield factors, or price surveys that overvalue finished products in parts of the country will cause the processor sector to be unhealthy. And that lack of health will be manifested in lack of investment in plant capacity to process the milk that supply and demand signals are asking to be produced. When the gross value of finished products moves from $12 to $23, the manufacturer of cheddar and whey achieving average yields does not get any larger margin. If the margin is insufficient in a $12 gross value, it is also insufficient at a $23 gross value. Ultimately, it is in the best interest of the producer sector to have a vibrant and competitive processing and manufacturing sector that develops innovative products that consumers like and creates a greater demand for their raw milk. Setting regulated prices too

high diminishes the interest and ability of processors to make such investments and results in foregone demand, benefiting neither producer nor processor.

The most important place in the system for supply and demand signals to be exerted is where the decisions are made regarding whether to produce or not; that is to say, price signals are critical at the farm. Although supply and demand signals at the processor level certainly have some value, they are largely muted by the existence of multiple classes and the pooling of revenues. Therefore, in a macro sense, the processor role in the system becomes one of being a conduit to transform the raw milk that is produced into the products the market is demanding. This is an important distinction when thinking about why it is not inequitable or bad policy to have a manufacturing allowance in an end-product pricing system.

MR. ROSENBAUM: At this point I would ask that Exhibit 69 be received into evidence.

JUDGE PALMER: Any objections? It is received.

(Exhibit No. 69 was received into evidence.)

MR. ROSENBAUM: Ms. Taylor is available for cross-examination.

JUDGE PALMER: Yes. Do we have questions?

MR. YALE: Your Honor, may I make a suggestion?

JUDGE PALMER: Yes.

MR. YALE: In light of the fact that Mr. Smith and Mr. Vetne are not here and we have some other prepared statements, maybe we ought to just get those in, and that way there is no disadvantage to them or their clients and we could move the hearing along.

JUDGE PALMER: Well, that seems reasonable enough. Does anybody object to that thought? We had one witness who came up to me before who wanted to give a statement. Where is he?

You said you would like to give

another statement. I don't see any reason why not to.

So why don't you step down for a moment and this gentleman will come back up. Do you have it ready with you?

MS. PICHELMAN: Your Honor, before we have another witness, I wanted to move that Exhibits 66, 67 and 68 also be received into evidence, please.

JUDGE PALMER: You are free to do that. I had forgotten. Thank you.

MS. PICHELMAN: Thank you.

(Exhibit Nos. 66, 67 and 68 were received into evidence.)

JUDGE PALMER: We will mark this as 70.

(Exhibit No. 70 was marked for identification.)

JUDGE PALMER: Mr. Wolfe, if you would just come around and raise your right hand. You were sworn before but we will do it again.

BRYAN WOLFE

a witness herein, having been first duly sworn, was examined and testified as follows:

JUDGE PALMER: This is Bryan Wolfe who is testifying on behalf of Ohio Farmers Union. Go ahead, sir.

DIRECT EXAMINATION

MR. WOLFE: My name is Bryan Wolfe. I'm a dairy farmer from Ashtabula County, Ohio. I am president of the Ashtabula/Geauga/Lake County Farmers Union, and I'm also vice president of the Ohio Farmers Union. My economic well-being and that of dairy farmer members of Ohio Farmers Union, which I represent, are tied to farm milk prices and the Federal system under which milk is priced.

JUDGE PALMER: Let me just note that we have marked your statement as Exhibit 70. Go ahead. Keep going, sir.

MR. WOLFE: Why are we here? According to the USDA Economic Research Service publication, "The Federal Milk Marketing Order

system was set up in the 1930s when milk producers had few market alternatives for their milk highly perishable products other than their local milk handlers. They were often essentially captive to unfair buying practices by local milk dealers. Federal Milk Marketing Orders were designed to level the playing field by returning some market power to the producers."

Is there anyone here today who believes the Federal Milk Marketing System is still working to return market power to the producers? We would welcome any indications which could support the idea that market equity, fairness or power are being returned to the producers.

Until the early 1980s, farm milk price did have some relationship to the market. This was assured by way of parity pricing. Since the early 1980s, the consumer price has continued to track the market for all items. The farmer's share of the consumer's dollar has been consistently trimmed, while the slice of the pie taken by those between the dairy

farmers and the dairy consumers has grown ever larger. This could only happen under a serious lack of market power by producers.

Today's hearing is a result of an original request by Agri-Mark to increase make allowances for Class III and Class IV products. Although Agri-Mark represents itself as a farmer-owned co-op within the Federal Milk Marketing System, according to a judicial decision in Shaw versus Agri-Mark, it is not simply a co-op representing farmers, but it has its own legal status as a Delaware corporation.

Therefore, Agri-Mark's relationship to farmers is legally ambiguous, but its legal status as established by the courts is clearly corporate. This ambiguity helps to explain why farmer-owned co-ops could pursue a modification to the Federal Milk Marketing Orders which runs counter to the interests of its producers. Most of the other co-ops' behavior suggests that they do not consistently represent the economic interests of producers.

It is a matter of simple observation and a matter of fact that this hearing process

consistently declines to consider proposals submitted which would return equity, balance and market power to producers.

Ohio Farmers Union submitted a proposal to AMS which would have restored some market power to producers and at the same time be reflective of markets as a whole. Any sustainable market system must consider a broad range of market factors, including the cost to produce that product, plus a profit. These price signals, along with reasonable processing, distribution and marketing costs, would be passed on to the final consumer.

The Ohio Farmers Union proposal was a three-prong pricing plan. The first part takes price signals from regional farmers cost of production. This concept is basic and is reflected in the 1937 Agricultural Adjustment Act, Section 608 C18. The second part takes price signals from the spot product markets. Finally, the third part considered retail price signals to the consumer. In that way it was very much a market-oriented plan.

USDA AMS rejected Ohio Farmers

Union's proposal out of hand, with no opportunity being offered to further develop or refine those items upon which USDA had rejected the proposal.

In hindsight, that was not surprising. Throughout this series of Federal Milk Marketing Order hearings, USDA has consistently ignored any proposal which includes the consideration of the cost of production for producers. Meanwhile, it has consistently acknowledged and accepted proposals which consider the cost of operation for corporate entities.

Section 608 C18 specifically states, "The Secretary of Agriculture, prior to prescribing any term in any market agreement or order, or amendment thereto, relating to milk or its products, if such term is to fix minimum prices to be paid to producers or associations of producers, or prior to modifying the price fixed in any such term, shall ascertain the parity prices of such commodities."

The press release for this hearing says, "Washington, D.C., May 4, 2007 - The U.S.

Department of Agriculture today announced that it will reconvene a national public hearing to consider proposals seeking to amend the Class III and Class IV product price formulas applicable to all Federal Milk Marketing Orders."

A case was filed in Ohio, Federal District Court, on behalf of several dairy producers to prevent the Federal Milk Marketing Orders make allowance changes. Their plea was denied. Considering the precedents in evidence during this hearing process, such a result might have been expected.

What was unexpected, however, was USDA's dismissive attitude toward the economic impacts on farmers in this case. USDA's motion states, "Plaintiffs cannot even bring themselves to admit that the higher make allowances benefit many manufacturers of milk products (such as cheese and butter) who are no longer bound by higher minimum prices. Nor do plaintiffs acknowledge that lower minimum prices, milk prices, also translates into a cost savings for consumers of milk and milk

products. Plaintiffs likewise ignore the projected savings to the public of an estimated $7 million a year as a result of reduced government outlays."

In his decision, Judge Jack Zouhary quotes Section 608 C18 completely on page 6 of his decision, which says in part, "The prices which it is declared to be the policy of Congress to establish in Section 2 of this title shall, for the purposes of such agreement, order, or amendment, be adjusted to reflect the price of feeds, the available supplies of feeds, and other economic conditions which affect market supply and demand for milk or its products in the marketing area to which the contemplated marketing agreement, order or amendment relates."

Obviously, neither the judge nor USDA seems to be concerned about the price of feeds or the relationship of the market areas. USDA seems to hang their hat on other economic conditions. Those other economic conditions can only be guessed at. However, the "other

economic conditions" do not seem to relate to returning some market power to producers, as mentioned by the USDA ERS.

Any reasonable person might think that if this law was being taken seriously, there would be some discussion of parity, which translates into cost of production.

As a matter of fact, this series of hearings seems to be about assuring corporate profitability by taking money from farmers. USDA's economic analysis proves that.

This series of hearings began when the on-farm milk prices, adjusted for inflation, was entering its darkest days. USDA seems not to care. USDA even underreports the NASS price survey for dairy products, further eroding the producer prices. The final chapter has yet to be written in what the actual price for non-fat dry milk really should have been.

Likewise, the final decision has yet to be written on the subject matter of this hearing. However, one could easily conclude that these hearings are not about any economic benefits or market equity for dairy farmers.

It is easy to get the impression that the hearings are about protecting the profits of dairy processors and billable hours of lawyers. Clearly, the interest of neither farmers, nor the milk consuming public, is served. Thank you.

JUDGE PALMER: Are there any questions? You may step down. Thank you, sir.

What other statements do we want to take? Let's go off the record.

(Discussion held off the record.)

JUDGE PALMER: On the record, we're going to recess for such time as Mr. Metzger needs to get a statement for him to read.

(Recess taken.)

JUDGE PALMER: I didn't get a motion as such from Mr. Wolfe to receive this statement. Is there any objection to the receipt of Exhibit 70, Mr. Wolfe's statement?

MR. YALE: No.

JUDGE PALMER: All right. It is received.

(Exhibit No. 70 was received into evidence.)

ERICK METZGER

a witness herein, having been first duly sworn, was examined and testified as follows:

JUDGE PALMER: Now we are marking as 71 Mr. Metzger's statement.

(Exhibit No. 71 was marked for identification.)

JUDGE PALMER: Mr. Metzger, would you give us -- actually, I guess you can just read your statement. You have got all the information you need in it, including your name.

MR. METZGER: Thank you, Your Honor.

DIRECT EXAMINATION

MR. METZGER: My name is Erick Metzger, and I serve as general manager of National All-Jersey, Incorporated. I have provided previous testimony at this hearing.

National All-Jersey, Incorporated, seeks to expand Proposal 2 submitted by

Agri-Mark to include the products of whey protein concentrate and lactose in the annual manufacturing cost surveys should Proposal 2 be enacted by the Secretary.

Several witnesses at the two previous sessions of this hearing have testified to the profitability challenges being experienced by cheese plants given the extraordinary increase in dry whey prices since last fall, combined with the fact that dry whey prices no longer serve as an equitable proxy for whey protein concentrate values. Many of these same witnesses have requested that "something" be done about whey valuations in the Class III price formula. Yet no proposals to value whey solids on any products other than dry whey were received in advance of the September 30, 2006, deadline for submitting proposals for this hearing.

Subsequent conversations among industry personnel have included the concepts of incorporating whey protein concentrate and/or lactose prices into product price formulas. However, no data exist from the

current manufacturing plant cost surveys on which to base a manufacturing allowance for either product. NAJ offers this amendment to Proposal 2 in order to begin to build a dataset of manufacturing costs for WPC's and lactose that might be used at a future Dairy Programs hearing.

In the same vein, NAJ further proposes that the weekly National Agricultural Statistics Service, NASS, dairy product price surveys be expanded to include whey protein concentrates and lactose. Dairy Market News, published by the USDA using data collected by Dairy Programs, reports prices for a variety of products, including WPC's and lactose. However, the Dairy Market News reports a price range for these products, and industry personnel typically use the midpoint of the range as that week's price. By building a dataset of NASS prices for WPC's and lactose, the industry will be better equipped in the future to submit and debate proposals on how to include these products in price formulas to value whey solids other than only using dry

whey.

WPC34 serves as an industry standard product for whey protein concentrate. Table 18 in the Dairy Market Statistics 2006 Annual Summary (appended to this statement) provides a commonly recognized product definition and price reporting format for WPC34. NAJ proposes that the parameters used by Dairy Market News when gathering and reporting WPC34 prices for Table 18 also be used to determine manufacturing plant eligibility for the annual cost survey, if adopted from this hearing, and by the NASS to survey prices for WPC34.

Likewise, Table 23 in the Dairy Market Statistics 2006 Annual Summary (appended to this statement) provides a commonly recognized product definition and price reporting format for lactose. NAJ proposes that the parameters used by Dairy Market News when gathering and reporting lactose prices for Table 23 also be used to determine manufacturing plant eligibility for the annual cost survey, if adopted from this hearing, and by the NASS to survey prices for lactose.

The entire Dairy Market Statistics 2006 Annual Summary is published at www.ams.usda.gov/dairy/mncs-dy20070525annual summary.pdf. If Code of Federal Regulation definitions are needed for whey protein concentrate and lactose, NAJ proposes to use the definition for lactose given in 21 CFR, Chapter 1, Section 168.12 (appended to this statement) to determine both the plants eligible to be included in the manufacturing cost surveys and the NASS price surveys. While many versions of WPC's are produced, WPC34 serves as an industry standard. 21 CFR, Chapter 1, Section 184.1979c (appended to this statement) gives a broad definition for whey proteins concentrate products. NAJ proposes that the subset of WPC's testing a minimum of 34 percent protein be used to determine both the plants eligible to be included in the manufacturing cost surveys and the NASS price surveys.

JUDGE PALMER: Does that conclude your written statement?

MR. METZGER: That concludes

my written statement.

JUDGE PALMER: And you have some exhibits attached?

MR. METZGER: Yes.

JUDGE PALMER: All right. Is there any objection to the receipt of Exhibit 71, the statement? There doesn't appear to be any so it is received.

(Exhibit No. 71 was received into evidence.)

JUDGE PALMER: Questions? Mr. Beshore.

MR. BESHORE: Marvin Beshore for DFA and Dairylea.

CROSS-EXAMINATION

BY MR. BESHORE:

Q. Erick, in your view are there enough sellers and manufacturers of the products on which you want data to be collected to support a nonconfidential database for those products?

A. I wouldn't know explicitly, but apparently confidentiality hasn't been a problem from the standpoint of those prices

being reported in Dairy Market News.

Q. Okay. Have you checked with NASS or AMS with respect to their views of the viability of collecting that data?

A. No, I have not.

Q. In terms of your operations with your duties with All-Jersey and your knowledge of the industry, do you think there are more than two processors, sellers of those products, so that you wouldn't have confidentiality issues?

A. Yes, I would believe there are more than two.

MR. BESHORE: Thank you.

JUDGE PALMER: Other questions? Mr. Yale.

MR. YALE: Ben Yale on behalf of Select Milk Producers, Inc., and Continental Dairy Products, Inc., and Dairy Producers of New Mexico.

CROSS-EXAMINATION

BY MR. YALE:

Q. Mr. Metzger, as part of National

All-Jersey's function, do you negotiate formulas or work with producers to negotiate formulas for the buyer of this milk?

A. Occasionally, yes.

Q. Do you collect information on what plants are paying for their milk on a regular basis?

A. In a manner of speaking, yes. On a limited scale.

Q. Are you aware of the formulas being used in Idaho right now?

A. Specifically, no.

MR. YALE: Okay. No other questions.

JUDGE PALMER: Any other questions? Yes, sir.

MR. BROWN: Michael Brown with Northwest Dairy Association. This is my first -- do you want me to give my address or just wait for my testimony?

JUDGE PALMER: Did you enter an appearance?

MR. BROWN: Yes. I submitted testimony last week.

JUDGE PALMER: You gave testimony. Why don't you give your full name and address.

MR. BROWN: Okay. Michael Brown with Northwest Dairy Association, 1130 Reinier, R-E-I-N-I-E-R, Avenue, Seattle, Washington.

JUDGE PALMER: We will take that as an entry of appearance and also allow you to question the witness. Go ahead, sir.

CROSS-EXAMINATION

BY MR. BROWN:

Q. Just one quick question, Erick. Based on -- I think this may have been in your prior testimony, but based on your analysis and looking at the processing of whey, do you believe there's as much whey used to make WPC's as there is to dry?

A. What our analysis showed, and it was in Exhibit, I believe, 43, was that there are actually more whey solids going into the concentrated forms of whey products than are going into dry weigh.

Q. Given that, would you expect that there's likely enough plants making dry whey to provide for an anonymous survey?

A. Yes, I would.

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

JUDGE PALMER: Very good. Any other questions? Anything you wish to add, sir?

MR. METZGER: No. Thank you.

JUDGE PALMER: All right. Fine. Let's take a ten-minute recess to see what's happening.

(Recess taken.)

MARK W. STEPHENSON, Ph.D.

a witness herein, having been first duly sworn, was examined and testified as follows:

JUDGE PALMER: We now have Dr. Mark Stephenson from Cornell University on the stand. Doctor, you have just been sworn, and we are going to mark your statement as Exhibit 72.

(Exhibit No. 72 was marked for

identification.)

JUDGE PALMER: So marked for identification. Now if you would proceed to give your statement.

DR. STEPHENSON: Thank you, Judge Palmer.

DIRECT EXAMINATION

DR. STEPHENSON: Judge Palmer and personnel of the AMS Dairy Programs, I am appearing before you to offer a summary of recent research projects in which I collected data on and summarized the costs of processing in cheese, whey, butter, and non-fat dry milk plants. I am not here to advocate for or against any particular policy action but, rather, to offer my insights into the current cost environment for dairy processors. This is a summary of my work and does not represent an official statement of Cornell University.

Cornell University has been conducting cost of processing studies in the dairy industry for more than 30 years. Over the past 20 years, work by the Cornell Program

on Dairy Markets and Policy group includes studies on the cost of processing cheese, whey, butter, and non-fat dry milk powder and fluid milk, footnoted on pages two and three of the testimony, myself having authored a number of those studies. This project assesses the costs of processing in cheddar cheese, dry whey, butter, and non-fat dry milk plants and builds on the knowledge and background of these earlier efforts. I was asked by dairy plants who participated in the previous project to re-run the analyses with more recent data.

Plant Selection. In the previous project, participating plants were selected on the basis of a random draw stratified by plant size. Because the time was short between the request to update the study and this hearing, the plants who were previously asked to participate were the only plants asked to participate again. This strategy had multiple advantages. One advantage is that plants were already familiar with the process of data collection. It also allows an opportunity to examine changes in processing costs in

same-plants from a previous time period.

There were 21 plants who responded with data, and of those plants, 19 submissions were deemed to have data without problems and are included in this study. The other two plants will correct their data and send it in, but too late for inclusion in this summary. Of the 19 plants, 11 processed cheese, 7 processed dry whey, 4 processed butter, and 7 processed non-fat dry milk.

Plants were asked to submit data corresponding to their most recently completed fiscal year. This ranged from the last quarter, beginning in the last quarter of 2005 through the second quarter of 2007. The bulk of the observations occurred during the calendar year of 2006. Figure 1 shows the temporal dispersion of the data in this report.

Data Collection. The previous project detailed the data collection and summary methods. It may be instructive to remind folks that the data collection used a computer program developed to build a questionnaire based on responses to previous

questions. For example, first identifying products produced at the plant generated subsequent questions about the package sizes and the monthly production of the individual products, and identifying package sizes then generated questions about the packaging costs for those particular containers, et cetera. When surveys are complete, they're submitted as an e-mail attachment or directly from within the program.

Methodology for collection and summary of the data closely follows industry-accepted practices of the California Department of Food and Agriculture, CDFA. Anywhere plant expenses can be directly allocated to particular products, plants are asked to do so. A good example is utility expense where individual electric or gas meters can be recorded and assigned to a product line such as cheese or powdered products. Some expenses must be indirectly allocated to products.

As per CDFA's procedure, any cost that cannot clearly be assigned to a single

product line is apportioned according to the percent of milk solids processed in the various product lines. For example, a plant that brought in 100 pounds of raw milk and processed it into cheese, dry whey and whey cream might have sold 5.85 pounds of solids (fat and solids-not-fat) in the cheese, 6.12 pounds of solids in the dry whey and .2 pounds of solids in the whey cream. This would mean that $10,000 of unallocated electricity would be apportioned as $4,807 to cheese, $5,029 to dry whey, and $164 to whey cream. Any other costs which are unallocated to specific product lines are apportioned indirectly in the same way as the electric cost example.

Direct allocation is, of course, best. But, the allocation by solids is generally a workable compromise where the detail is not available. In a butter-powder plant that sells only butter and non-fat dry milk, it is possible that indirectly allocated costs may be too heavily assigned to one of the products. However, all of the expenses of the plant are accounted for in the butter and

non-fat dry milk cost estimates.

A more serious problem with indirect allocation can exist when products that are not reported in the study have received an inappropriate weighting of an expense. This occurred in the previous study but was caught between the publication of the working paper and the testimony that I gave. I opined at the testimony that the allocation change appeared to be unique to a single butter-powder plant.

Plants that sell a significant portion of total solids as intermediate products can fall into this allocation problem. For example, a butter-powder plant that sells a large amount of cream or skim milk, or even condensed product, can overstate the indirectly allocated expenses for those products and thus underestimate the true costs of producing butter or powder. Upon examination, more than the single plant from the previous testimony had this problem to a lesser, but significant degree. The attempt has been made to correct this problem this time in the summary. Ultimately, directly allocating expenses on the

part of plants eliminates this problem.

Processing Cost Results. Although there were a reasonable number of plants participating in this data collection, I will not list them as groupings of low and high cost plants to assure confidentiality of individual plant data. I am reporting the weighted average costs by categories which correspond to CDFA's reports on manufacturing costs.

Table 1 shows the weighted average processing costs for the 11 cheese plants participating in the project and Figure 2 shows the breakdown of the costs.

Let me just read a couple of the lines on Table 1. The first line is the weighted average summary of this particular study. The pounds of cheese averaged by the plants were a little over 118 million pounds annually. The labor costs were 4 cents per pound, the energy costs were 1.65 cents per pound, ingredient costs 2.51 cents per pound, packaging costs 2.38 cents per pound, repairs and depreciation and a few other costs were 3.34 cents per pound, general and

administrative costs were .76 cents per pound, return on investment 1.19 cents per pound, for a total of 15.84 cents per pound.

The last time when these costs were reported, we had plants in the survey that averaged a little over 60 million pounds of cheese processed, and labor costs were 4.35 cents per pound, 1.74 cents per pound for energy, ingredient costs were 1.47 cents per pound, packaging 1.98 cents per pound, repairs and depreciation 4.46 cents per pounds, general and administrative costs 1.26 cents per pound, return on investment 1.12 cents per pound, for a total of 16.38 cents per pound.

Table 1 also shows the weighted average costs from the project offered in the previous testimony. It may be noted that the total processing costs reported actually declined from the previous summary. However, it should also be noted that there are three large plants that are included in the current summary that were not included in the last report because their data was submitted too late for inclusion. Please note that the

average annual pounds of cheese processed nearly doubled from the previous report. There are eight plants which participated in both projects and allow a plant-by-plant comparison of the costs from the previous report and this one. Comparing the same plants shows that processing costs have actually increased about 1.7 cents per pound since the last study.

Table 2 shows the weighted average processing costs for the seven dry whey plants participating in the project and Figure 3 shows the breakdown of those costs.

Again, reading from the table, the weighted average volume of product in the plants per pounds of whey this year was 58,722,459 pounds. The labor costs were 4.12 cents per pound, energy costs 4.24 cents per pound, packaging costs 1.46 cents per pound, repairs and depreciation 5.8 cents per pound, general and administrative 2.03 cents per pound, return on investment 2.11 cents per pound, for a total of 19.76 cents per pound.

The last time volumes were similar, a little bit smaller, at 47,394,657 pounds.

Labor was evaluated last time at 4.16 cents per pound, energy 3.47 cents per pound, packaging 1.08 cents per pound, repairs and depreciation 5.93 cents per pound, general and administrative costs 2.62 cents per pound, return on investment 2.16 cents per pound, for a total of 19.41 cents per pound.

Table 2 highlights that dry whey processing costs have only modestly changed since the last report. Although the average annual pounds of whey processed is larger, and there are increases in energy and packaging costs, they are somewhat offset by smaller expenses for repairs, depreciation, general and administrative and return on investment. The total costs have increased by less than half a cent per pound. The same thing is shown by the same-plant comparisons from the last collection to this one.

Table 3 shows the weighted average processing costs for the four butter plants participating in the project, and Figure 4 shows the breakdown of the costs. The processing costs for four butter plants, the

weighted average this time was 57,626,803 pounds per plant, the labor costs were 5.22 cents per pound, energy 1.57 cents per pound, ingredients .29 cents per pound, packaging 1.89 cents per pound, repairs and depreciation 6.62 cents per pound, general and administrative 2.04 cents per pound, return on investment .83 cents per pound, for a total of 18.46 cents per pound.

The last time reported average volume in the plants of 60,223,592 pounds per plant. Labor costs were 4.35 cents per pound, energy 1.74 cents per pound, ingredients .19 cents per pound, packaging 1.98 cents per pound, repairs and depreciation 5.74 cents per pound, general and administrative 1.26 cents per pound, return on investment 1.12 cents per pound, at the total cost of 16.38 cents per pound.

Table 3 indicates that butter plants have seen an increase in overall costs of processing, up a little more than two cents a pound. Average plant volume is similar, but labor, non-milk ingredients, repairs and

depreciation, general and administrative costs have all increased and are only partially offset by modest declines in energy, packaging and return on investments.

Table 4 shows the weighted average processing costs for the seven powder plants participating in the project, and Figure 5 shows the breakdown of the costs. The processing costs for seven non-fat dry milk plants included weighted average volumes of 70,142,458 pounds per year. Labor costs 3.62 cents per pound, energy 4.09 cents per pound, packaging 1.59 cents per pound, repairs and depreciation 3.72 cents per pound, general and administrative 2.17 cents per pound, return on investment 1.43 cents per pound, for a total cost of 16.62 cents per pound.

The last time the weighted average volume included -- or just the average volume in the plants was 55,066,936 pounds; labor costs were 3.39 cents per pound; energy, 3.15 cents; packaging, 1.43 cents; repairs and depreciation, 3.59 cents; general and administrative, 1.96 cents; return on

investment, .72 cents, for a total of 14.23 cents per pound.

All of the same non-fat dry milk plants participated in this and the previous study. However, Table 4 shows that these plants on average processed considerably more product than in the previous time period. The plants are also showing a significant increase in the weighted average cost of processing, somewhat more than 2 cents per pound. This is due in part to real increases in some costs (labor, packaging, repairs, depreciation are good examples) and in part due to the changes in the methodology of indirectly allocating costs. Energy is particularly a good example of using a better indirect allocation of costs in plants with significant sales of bulk liquid products.

In summary, in the previous study, the bulk of plant-month observations came during the 12-month time period of July 2004 through June of 2005. This time, calendar year 2006 was where I had the majority of the observations. Over that year and a half,

plants have continued to observe increased costs of processing. These are most pronounced in the same-plant comparisons for cheese, butter, non-fat dry milk and less so for whey processing.

Energy was the most common cost center increase in all products. Labor also accounted for significant increases in costs across all products; and, for most products, increases in packaging costs were also notable.

It is particularly true in non-fat dry milk plants that the indirect allocation method using pounds of solids can misapportion costs between products. In the last testimony, this has had the effect of understating the costs of processing non-fat dry milk. An attempt has been made to correct this problem in the summary of the data, and a procedure will be implemented to correct the problem at the point of data collection in the future.

If you have any questions, I would be glad to try and answer them without divulging any confidential data.

JUDGE PALMER: Are we just

going to do direct? All right. Well, direct is complete. You will be back tomorrow morning for cross.

Who is the next witness?

MR. CHRIST: Your Honor, I'm Paul Christ. My attorney is out of the room right now.

JUDGE PALMER: Well, we have an eager gentlemen from Seattle right behind you. Do you want to come on up now?

Incidentally, on the record, we will receive Dr. Stephenson's statement. It is received.

(Exhibit No. 72 was received into evidence.)

JUDGE PALMER: We will mark Mr. Brown's statement as Exhibit 73.

(Exhibit No. 73 was marked for identification.)

JUDGE PALMER: All right, sir. Please give your statement.

MICHAEL L. BROWN

a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

MR. BROWN: My name is Michael Brown. I am the Director of Policy and Planning for Northwest Dairy Association, which is usually referred to as NDA. I am testifying on behalf of NDA. My responsibilities include milk procurement, milk marketing, and representing NDA on milk policy issues relating to pricing and other regulations. Before joining NDA in 2004, I worked as general manager of National All-Jersey, Inc., a dairy producer trade association focused on milk pricing issues, for over ten years.

NDA is a dairy cooperative marketing the milk of approximately 610 dairy farmers in Oregon, California, Idaho, and Washington. Approximately 500 of our producer members are part of the Pacific Northwest Federal Milk Marketing Order, Order 124. Approximately 110 Grade A producers are located in the

unregulated area of Eastern Oregon and Southern Idaho.

NDA conducts all of its processing and marketing operations through its subsidiary, Darigold, Inc. Darigold operates three Class 1 processing plants in Order 124, in Seattle, Washington; Portland, Oregon; and Medford, Oregon; and one unregulated Class 1 plant in Boise, Idaho. Darigold operates four dried milk product plants located at Lynden and Chehalis, Washington, and Caldwell and Jerome, Idaho. Darigold also operates a cheese/whey plant in Sunnyside, Washington, and a Class II and butter plant in Issaquah, Washington. About 80 percent of our cooperative milk supply is processed through these plants.

NDA believes that Federal Orders need to establish fair but minimum prices for producer milk used in Class III and IV manufacturing. To do this, USDA must take a view of product yields, product values and manufacturing costs that will allow the Class III and IV prices established by Orders to generate milk and milk component prices that

reflect the true manufacturing value of milk, but do not create undue hardship to cooperatives or other processors that manufacture the products reflected in the price formulas.

NDA supports consideration of Proposals 1, 2, 9, 10, 12, 14 and 17. We believe these proposals offer ways for USDA to improve the current pricing formulas and offer fair but minimum manufacturing milk prices. We oppose Proposals 3, 4, 6, 7, 8, 15 and 18. We believe they are too constrictive to meet USDA's obligation to set minimum Class pricing under the Federal Order program.

In my three years at NDA, I have had the opportunity to learn about our manufacturing operations, the challenges we face, and the opportunities we have to improve these operations. We believe we do an average or better job in both product yields and quality, but we also struggle with profitability in our manufacturing plants. We believe that USDA must consider NASS price surveys, USDA pricing formulas, and

manufacturing allowance surveys must be evaluated together in order to understand how they interact to determine milk prices. USDA must evaluate the limitations of their data in order to successfully use it to generate fair but minimum milk prices, and not cause undue harm by setting prices for milk that cannot be recovered from the marketplace.

Whey Cream Valuation. Our experience with whey cream sales finds a significant difference in value compared to sweet cream. All cream is generally valued at a multiple of the butter price. USDA reports multipliers for sweet cream in the Dairy Market News. Our Ingredients Division supplied me with the price multiples for whey cream and sweet cream over the past two years. Based on the CME price -- correction. Actually, I have three years of data. Based on the CME butter price, we have calculated the comparative values of our whey cream to our sweet cream sales, and the Federal Order Class III butterfat price for these periods. The product of this multiplier and the average monthly

Chicago Mercantile Exchange Grade AA butter price equals the value of butterfat in these products.

We can concur with other witnesses that consolidation in the butter industry has impacted the prices we receive for our whey cream over the past three years. On a butterfat basis, the difference in value between our whey cream and both sweet cream and Federal Order butterfat prices widened significantly from 2005 to 2006. All of our whey cream sales are FOB our Sunnyside plant. Our whey cream multiple averaged 36 percent below our sweet cream multiple during 2005 to 2007. For the same three-year period, the price we received for whey cream on a butterfat basis averaged 47.4 cents lower than sweet cream and 24.4 cents below the Federal Order Class III butterfat price. After 2005, the difference became more startling. Our 2006 sweet cream price averaged 56 cents higher than our whey cream sale price, and the 2006 Federal Order Class III butterfat price was over 29 cents above the whey cream price. These

differences make the use of a lower value for whey cream the logical choice for valuing that whey cream in the Class III protein formula, and I have a chart I am going to read through here quickly.

The Darigold whey cream value comparisons, the difference from sweet cream and Federal Order Class III butterfat on a per-pound of butterfat basis, sales FOB the plant.

In 2005, our whey cream versus sweet cream, there was a .2186 difference in multiple, which resulted in a 34.89 cents difference in price, a 15.6 cent difference price between whey cream and Federal Order butterfat price. In 2006, the multiple was a negative .4578, a difference of minus .5694 in price, and again, compared to the butterfat Federal Order price, a minus 29.16 cents.

In 2007 that multiple was minus .4045 the whey cream versus sweet cream, which was a difference in value of 50.31 cents negative. Whey cream versus Federal Order butterfat was minus .2857 cents.

The three-year average on whey cream, the multiple was minus .3603, below the sweet cream multiple, which on a per pound of butterfat basis equaled minus 47.38 cents. Compared to the Federal Order Class III butterfat, three-year average was minus 24.44 cents.

NASS versus Actual Plant Product Average Selling Prices. Product prices are an area where the NASS survey only tells part of the picture. Hard as we try, not all of our product meets the stringent NASS specifications, and we sell products below our NASS reported prices. This means that our average selling prices for all of our products are actually average below the price we report to NASS due to off-spec product.

We accept that our sales force may not garner prices that are always equal to or above the national NASS average. Particularly with our western location, that is not always possible. However, whether through NASS surveys, make allowances, or yield formulas, USDA currently assumes that all product

produced in a plant is sold at the full NASS price. Leaving some room in yield formulas and manufacturing allowances to reflect this reality is necessary to achieve the goal of fair minimum prices.

Off-spec product can significantly impact the total revenue a plant generates. Darigold's fiscal year 2007 business year ran from April 2006 through March of 2007. Out of our entire FY07 cheddar cheese production. 96.02 percent met the NASS specs to sale at the full grade price. These cheese sales were reported to NASS. The remaining 3.98 percent of cheese included under grade cheddar, trims and fines. These products sold for a weighted average price of 21.8 cents less per pound than the cheddar meeting the NASS reporting specs. The net impact of these off-spec products on our average cheese sale price was 0.9 cents per pound, but since these sales are not reported, NASS does not recognize this difference in the average cheese value for all cheese sold. I added that last part.

Whey processing also results in

off-spec whey. 3.23 percent of our whey failed to make reportable grade and was marketed at an average discount of 29 cents per pound to the extra grade whey market. These sales were not reported to NASS. This feed-grade whey production represented 3.23 percent of our total whey production and lowered the average overall value of all of our whey sales by 0.9 cents per pound compared to the average price for all NASS reported sales. This difference represents a 2.5 percent reduction off of our NASS reported price.

About 1.5 percent of our non-fat dry milk sales were for off-spec product in fiscal year 2007. It sold for an average value of 38.9 cents less than the non-fat dry milk sales reportable to NASS, and lowered the average price of all Darigold non-fat dry milk sold to by 0.6 cents below our average NASS reported sale.

While USDA does not use buttermilk yields and pricing in their Federal Order formulas, they have recognized that sweet cream buttermilk is a by-product of butter

manufacturing. The buttermilk yield and value is indirectly represented in the non-fat dry milk portion of the yield formulas. When we separate milk in our non-fat dry milk plants, about 4.4 percent of the total skim milk solids end up in our cream, and most of that volume eventually makes it back to the dryer as buttermilk. There is value here, but in fiscal 2007 our dried sweet cream buttermilk sales averaged 3.63 cents below our average non-fat dry milk price reported to NASS.

Cheese and Whey Yields.

Manufacturers know that most of the milk components that leave the farm end up in products that a plant can sell at NASS prices, although there are also component losses in all areas of dairy product production from farm to finished product. While we do not document the step-by-step losses, our yields are impacted by this reality.

The cheese yield formula has enjoyed, or perhaps better described as endured, significant discussion at this hearing. There has been both plant information

and theoretical speculation on yields entered into the record. I would like to add to this discussion by talking about our cheese making process at our Sunnyside plant. We make two cheese products in this plant: cheddar blocks and Monterey Jack. About 90 percent of our cheese volume is cheddar.

The Darigold cheddar plant in Sunnyside was opened in 1996 and uses the most modern horizontal vats in its cheese manufacturing operations. During our 2007 fiscal year, we converted 1.28 billion pounds of milk into 130.7 million pounds of cheddar cheese, resulting in an average actual yield of 10.22 pounds cheese per hundredweight with an average moisture of 38 percent. The milk used in the vats contained an average of 3.68 percent butterfat and 3.05 percent true protein. The 10.22 percent cheese yield approximates about a 92 percent butterfat recovery.

In 2007, 96.02 percent of this cheese was full quality, 3.11 percent was under grade, 0.56 percent was trim, and 0.31 percent

was recovered fines. Any unrecovered fines which we can't sell aren't included in these numbers. Under the current Federal Order yield formula, the predicted yield for this milk is 3.68 pounds butterfat times 1.572 plus 3.05 pounds true protein, that's 1.383, which equals 10.00 pounds cheese. Our actual yields were plus .22 pounds per hundredweight higher than the Federal Order formula yield, reflecting a 2 percent difference. Keep in mind this is a very modern, efficient plant.

Darigold does use some whey cream in the cheese vat at times, and its use is reflected in the yields above. However, use of whey cream does cause problems as in the manufacturing process. First of all, in our experience, the whey butterfat recovery in the cheese from whey cream is significantly lower than from fresh cream, about 75 percent compared up to 92 percent. Second, there can be quality problems in cheese when whey cream is used, particularly with soft curds. Third, many customers simply will not allow whey cream to be used in the cheese making procedure due

to quality considerations. These three issues do create significant limitations on how much whey cream can be used in the vat.

At this time, we convert all of our whey solids into dry whey. We also purchase a significant amount of whey solids from another cheese processor in the Pacific Northwest, which we also convert to whey. This combination of internal and outside whey yields makes it more difficult to accurately pinpoint our whey yields, but we estimate our internal yield at 5.58 pounds whey per hundredweight. While we are not proud of this yield, it is much less than USDA's assumed yield of 5.86 pounds at reference tests, and again, this is a yield that comes out of a modern plant.

Revenue comparisons from actual yields and product prices. Combining plant yields and discounts for off-spec products demonstrate how looking at the total picture of product yields, make costs and product prices must all be carefully considered in total when determining -- scratch "where" -- milk pricing. As hard as we work to maximize production of

products that fully meet market specs, some of the product we manufacture is not of the quality required to return the market price.

As discussed above, all of our cheese is not marketed as full grade, despite our best efforts to make quality product. While our cheese production was 2 percent higher than the Federal Order yield formula would indicate, during fiscal year 2007 the weighted average value of all of our cheddar cheese was 0.7 percent lower than the price we reported to NASS. Together, these differences resulted in a net value of cheese per hundredweight that is only 1.4 percent more than predicted by assuming all USDA cheese yields and all sales sold at NASS. And remember, this is a very modern plant using the latest equipment.

We also do not enjoy the average NASS price for most of our products. We cannot disclose our actual average cheese sales price for competitive reasons, but like most western plants, we are selling our cheese at below the weighted average NASS cheddar price, further

reducing revenue compared to USDA's "Formula Yield times NASS Price" calculations. In years like this past fiscal year, when barrel prices are higher than blocks for much of the year, our price on reported cheese is even more out-of-line with the weighted average block-barrel price.

We sold our whey cream for an average of 50 cents below our sweet cream on a pound butterfat basis during our fiscal year 2007. Since about 8 percent of our cheese plant butterfat ends up in whey cream, we would derive 14 cents less on a hundredweight basis from our cream compared to a sweet cream sale.

In fiscal year 2007, our whey revenue per hundredweight now does not meet USDA assumptions. As mentioned earlier, our purchase of outside condensed whey makes it more difficult to determine our actual whey yields from our milk, but we believe it is about 5.58 pounds, or 5 percent less than USDA assumes for Federal Orders. As previously mentioned, our average whey product value is 2.13 percent less. In our plant, our total

whey revenue was 7.2 percent less than would be predicted by USDA's whey formula and our reported sales to NASS.

Again, we would emphasize that this data is from a very large modern and efficient plant that produces a quality cheese in high demand.

Manufacturing Cost Studies are not perfect. Manufacturing cost studies, like most business analysis, do rely on some assumptions in order to determine costs. In his testimony from the September 2006 Make Allowance hearing, Dr. Mark Stephenson noted that the 2006 CPDMP study assigns costs based on a solids allocation where no other definition was clear. After further discussion with Dr. Stephenson, we discovered that in our powder plants, cream costs were assigned as a percent of the total costs, based on butterfat solids as a percent of total solids.

But in our non-fat dry milk plants, cream is simply separated and stored in silos to be sold or moved to our butter churn at a separate location and count for only a small

portion of the total manufacturing cost within our non-fat dry milk drying plants. These costs were not transferred to a butter churn as the butter churn is centralized and did not participate in the past survey due to its complicated nature, and the survey was not made to pick up those costs. By assigning costs to cream based on the cream percentage of total solids, much higher costs were assigned to cream than could normally be expected. This allocation assumption lowered our non-fat dry milk processing costs by about 3.6 cents per pound non-fat dry milk compared to our estimates of the actual costs, which, by the way, Mark used for his survey.

Our non-fat dry milk production represented 54 percent of the total product volume represented in the survey. Based on the costs that were overallocated to cream had been assigned to non-fat dry milk, corrections to our four plants would have increased the total survey make cost for non-fat dry milk by more than 1.9 cents.

In his new survey, as you have now

heard in testimony, Dr. Stephenson will be adjusting his cost allocations to better reflect the structure of our non-fat dry milk plants. We also are supplying Dr. Stephenson the butter processing information from our centralized butter plant. Because this plant is centralized, it is large and efficient. However, we would also like to acknowledge that the movement of cream from our drying plants to this centralized plant does add about 4.2 cents to the processing cost per pound of butter.

Our experience with these surveys show the importance of as much data as possible, including the audited California cost survey data, which is the most meticulously collected data available to the industry. Think of the impact on non-fat dry milks that would have occurred if the California data had not been included in the analysis, and, I would add, USDA's tentative final decision on make allowances

We believe our plant experience underlines the need to use conservative yet realistic yields, manufacturing allowances and

price levels when developing pricing formulas. We urge USDA to consider our plant experiences as they fine-tune the Federal Order Class III and IV milk price formulas. That concludes my testimony.

JUDGE PALMER: All right, sir. We're going to defer your cross-examination until tomorrow. Off the record for a second.

(Discussion held off the record.)

JUDGE PALMER: All right. Who else do we have?

MR. ROSENBAUM: Dr. Yonkers has a very short statement. He is ready to go.

JUDGE PALMER: Dr. Yonkers.

MR. ROSENBAUM: This is slightly revised from what is on the Web site so we will get you a copy.

JUDGE PALMER: All right. We're going to mark Dr. Yonkers' supplemental statement here as Exhibit 74.

(Exhibit No. 74 was marked for identification.)

JUDGE PALMER: I think we can

proceed.

ROBERT YONKERS, Ph.D.

a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ROSENBAUM:

Q. Dr. Yonkers, could you read your testimony, please.

DR. YONKERS: Thank you, Your Honor.

A. IDFA earlier in this hearing testified in opposition to Proposal 20, but at that time no proponent witnesses had yet testified, and we indicated that we might provide additional testimony after we had heard from the proponents. Nothing in the proponent testimony that was subsequently presented in Indianapolis changed IDFA's opposition.

As noted in my previous testimony, without an adequate level of make allowance, a manufacturing plant cannot continue to operate long term, as it will have insufficient funds available to pay the vital costs necessary for

operating the plant. For that reason, increased costs must lead to an increased make allowance.

Proposal 20 requires the same procedure to determine changes in cost of manufacturing as are currently utilized by USDA in deciding to change a make allowance. However, instead of using the results of that determination to change the make allowance and allow the minimum farm milk price to change so that processing and marketing costs are reflected in regulated minimum prices, Proposal 20 would leave the make allowance unchanged. It would simply identify the amount of the cost increase and require handlers to try to negotiate with their customers in an effort to recover these increased costs in the form of a surcharge added to the wholesale dairy price. If this "let's hope it works" effort fails, the processor and others like it are doomed to returns inadequate to cover their costs, given that the minimum milk prices to farmers they will continue to be obligated to make will not have been changed whatsoever.

The proponent witness cited what he claimed were several examples of surcharges like the ones he envisions being attempted by manufacturers to effectuate Proposal 20. However, two of those examples are regulated charges that all regulated processors must pay, (the MilkPEP check off assessment and the Pennsylvania Milk Marketing Board over order prices), so no one can avoid having to bear them. And the third example was DairyAmerica's attempt to implement an energy surcharge on non-fat dry milk prices. But during redirect, the witness noted that even a large U.S. supplier of non-fat dry milk was only a small player in international markets. Certainly, it would be improbable if not impossible for such a small international player to change long established terms of trade by introducing a new surcharge based simply on USDA's determination that costs of processing in the U.S. allowed for such a surcharge.

One of the fatal flaws in Proposal 20 is that processors regulated by Federal Orders face competition from not only

unregulated areas and even unregulated milk in Federal Order marketing areas, but also from states like California which has its own milk price regulations and is unlikely to change its longstanding practices of changing make allowances in response to changes in costs of processing. Therefore, the examples to which the proponents point do not apply to the situation their proposal could create. Handlers purchasing milk from non-federally regulated suppliers would have lower, or no, minimum milk price obligations to farmers, and would have a substantial cost advantage over federally regulated handlers. Federally regulated handlers would not find it possible simply to insist that their customers pay a surcharge. Their customers would instead go to suppliers who would be more than happy to meet their needs without the increased price.

One obvious alternative for a customer would be to purchase off the CME. Proponent's witness implies that this obvious choice should be ignored because longstanding price relationships between the CME and actual

transaction prices can be altered quite easily. IDFA is of the opinion that this might sound good in theory, but in practice would be an utter failure.

Take the hypothetical example used during cross-examination of the proponent's witness, where the current market situation yields a CME price of $1.40 for cheddar cheese and USDA has determined that the costs of processing have increased by 3 cents per pound of cheese. If an example processor has a longstanding practice of pricing cheese to a customer at exactly the CME price, Proposal 20 requires that handler now seek to charge that customer the CME price plus 3 cents per pound. How much common sense can it take to see that the customer, who in the past has had the option of paying $1.40 either to the CME or to the cheese processor and chosen to buy from the cheese processor, now is faced with the alternative of paying the cheese processor $1.43 or buying on the CME for $1.40. The choice is no longer revenue neutral; rather, continuing to purchase cheese from the cheese

processor would cost the customer 3 cents more than the going CME market price.

Clearly, increasing the established price relationship with the CME is not as simple in the real world as the proponent's witness wants USDA to believe. Furthermore, this hypothetical buyer has more options available to a customer than just the CME, like plants not regulated by Federal Orders in California and other areas of the country. That concludes my statement.

MR. ROSENBAUM: We would ask that it be admitted into evidence.

JUDGE PALMER: Very well. We will receive it. Oh, I should have received 73. I don't think I did. 73 and 74 are received.

(Exhibit Nos. 73 and 74 were received into evidence.)

DR. YONKERS: Thank you, Your Honor.

MR. SMITH: Your Honor, the desk didn't give me complete copies of Mr. Christ's testimony.

JUDGE PALMER: Somebody was collating.

MR. SMITH: That was me. I collated the complete statement.

JUDGE PALMER: Do we have another witness or is that it?

MR. SMITH: We could start out with Mr. Christ in the morning.

MR. BESHORE: Is it different than the --

MR. SMITH: It will be ten minutes extra in the morning, if I could beg the Court's indulgence.

JUDGE PALMER: All right. We will recess now until 9:00 tomorrow.

MS. PICHELMAN: Your Honor, was 72 received?

JUDGE PALMER: I received everything. Yes, 71, 72, 73.

(Whereupon, the above-entitled matter was adjourned at 4:45 p.m. this date.)

C E R T I F I C A T E

I hereby certify that the proceedings and evidence are contained fully and accurately in the stenographic notes taken by me on the hearing of the within cause and that this is a correct transcript of the same.

S/SANDRA J. MASTAY