

BEFORE THE UNITED STATES DEPARTMENT OF AGRICULTURE

In the Matter of:

MILK IN THE NORTHEAST AND

OTHER MARKETING AREAS

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**DOCKET NO. AMS-DA-07-0026;
AO-14- 77, et al.; DA-07-02**

**BRIEF OF DAIRY PRODUCERS OF NEW MEXICO,
SELECT MILK PRODUCERS, INC., AND
CONTINENTAL DAIRY PRODUCTS, INC.**

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I. Introduction

A. Summary of Argument

Dairy Producers of New Mexico, Select Milk Producers, Inc., and Continental Dairy Products, Inc., request that the Department adopt proposals 3, 6, 7, 8, and 15 as modified by the testimony at the hearing. Specifically, these producer organizations request that the formulas for the component prices be as follows (changes are in ***bold italics***):

Butterfat = (Butter price - ***.115***)****1.22***

Protein = (Cheese Price - ***.1638***)****1.405*** + ((Cheese Price - ***.1638***)****1.653*** - ***.94****(BF Price))****1.214***.

SNF = (NFDM - ***0.1410***)*1.02

Other Solids = (Dry Whey - ***.1590***

Two other hearings involving product prices remain open for consideration by the Department. The Department issued an Interim Order in the Class III/IV make allowance hearing, but a final decision has not been issued. No decision has been reached in the Class I/II hearing on decoupling.¹ Those two hearings and this hearing are inextricably linked. When making a recommended decision in any one of these proceedings, the Department should be mindful of the impact that decision will

¹71 Fed. Reg. 67489, 67495.

have on the remaining open proceedings, and to the extent possible, leave comments open so that the effects of each decision can be weighed in light of changes in the other proceedings.

B. Standing

Dairy Producers of New Mexico (DPNM)² is a not-for-profit trade association of producers in New Mexico and Texas. It advocates the interests of its producer members in legislative, judicial and agency proceedings. DPNM is an “interested party” in these proceedings as that term is used in 7 C.F.R. §900.8(b). DPNM is the proponent of Proposals 3, 6, 7, 8, and 15.

Select Milk Producers, Inc. (Select) supports the proposals of DPNM and is a milk marketing cooperative association of producers which markets milk on behalf of its members into Orders 126, 5 and 7, and other orders. Select is an “interested party” in these proceedings as that term is used in 7 C.F.R. §900.8(b).

Continental Dairy Products, Inc. (Continental) also supports the proposals of DPNM and is a milk marketing cooperative association of producers which markets milk on behalf of its members into Orders 33, 5, and 7, and other orders. Continental is an “interested party” in these proceedings as that term is used in 7 C.F.R. §900.8(b).

II. Changes to the Cheese Protein Price Yield and Nonfat Solids Yield Factors.

DPNM’s proposals 6, 7, and 8 would change the protein price yield factor and the nonfat solids yield factors to account for (1) 94 % butterfat recovery; (2) the presence of 83.25% casein in true protein at average producer test; (3) the butterfat to protein ratio of 1.214 at average producer test; and (4) the fact that plants yield more than 0.99 pounds of nonfat dry milk from one pound of solids-not-fat. Utilizing these adjustments the formula should be as follows:

²Each of DPNM, Select, and Continental are referred to collectively as DPNM.

Protein = (Cheese Price - .1682)***1.405** + ((Cheese Price -.1682)***1.653** - .94*(BF Price))***1.214**.

Nonfat Solids = (Nonfat Dry Milk Price - 0.14) * **1.02**

A. Cheese Formula Analysis

The parts of this formula which are at issue in Proposals 6, 7 and 8 are the percent of casein in protein and the butterfat recovery rate. In addition, because of the single manufacturing class butterfat price, the ratio of fat to protein ratio is also a necessary part of the cheese to protein formula even though it is not part of the Van Slyke formula itself.

The current formula assumes that a plant recovers 90% of the butterfat when making cheese. The butterfat recovery percentage should be increased to 94% to reflect modern efficiencies and to eliminate farm-to-plant shrink. The use of a higher butterfat recovery is supported by (1) A statement by IDFA's expert witness that her cheese plants use 100% of the butterfat delivered to the plant; (2) CDFA and RBCS studies reporting butterfat yields in excess of 94%; (3) Empirical studies using a recovery of 93% and published articles relying on a 92% recovery; (4) Opponent testimony that whey cream can and is used again; (5) Sales literature promising vat recoveries in excess of 94%; and (6) Academic reports advising cheddar cheese makers how to utilize whey cream in cheese vats.

Second, the current formula assumes that casein represents 82.2% of the true protein in milk. At statistical standards, the actual percentage of casein in true protein is 83.25%. At average producer tests, the actual percentage of casein in true protein is 83.10%. DPNM proposes to change the percentage of casein in the formula to reflect the more accurate percentage of casein either at the statistical standards or the weighted average producer's test as supported by the following: (1) Evidence showing that the average weighted test of producer milk for true protein is 3.04% and for butterfat is 3.69%; (2) By applying 78% casein in total protein and adjusting total protein 0.19% for non-protein nitrogen, the percent of casein in true protein at the standardized test is 83.25% and at

the weighted average producer test the true protein is 83.10%; and (3) the current rate of 82.2% is consistent with true protein of 3.56% or a rate significantly higher than the standard or average milk marketed through the FMMO system.

Finally, the fat to protein ratio in the cheese to protein formula used to adjust protein to compensate for the difference between Class III and IV butterfat should be changed to 1.214 to reflect average producer tests of butterfat and true protein. This is based upon evidence that shows that the average weighted test of producer milk for true protein is 3.04 and for butterfat is 3.69 and, therefore, the ratio of fat to protein of average producer milk is 1.214, not 1.17.

The nonfat dry milk (NDM) to solids not fat (SNF) yield should be 1.02, not 0.99. The implication in the current formula is that by taking 100% solids of SNF and adding 3 to 4% moisture there is less NDM than SNF. But reports by Cornell show yields in excess of 103% plus the value of dry buttermilk. A yield of 1.02 is consistent with facts and fairness.

1. The butterfat recovery factor in the cheese to protein formula should be increased to 94%.

The Department premised its selection of a 90% butterfat recovery on testimony from Kraft, Leprino, and cheese vat technology from the late 1970's and early 1980's.³ The stated grounds to support a 90% butterfat recovery in the 2002 Final Decision are unreasonable and unsupportable today.⁴ First, Kraft does not make the commodity cheddar cheese reported in the NASS survey but makes a higher quality cheese that has a different value and is produced in a manner different than commodity cheddar cheese.⁵ Similarly, Leprino does not make any commodity cheese (but recovers

³67 Fed. Reg. 67907, 67929 (November 7, 2002).

⁴*Id.*

⁵McCully 1116-18.

all of its butterfat in the cheese it does make).⁶ Regardless, basing the value of milk produced by farmers in 2007 using plant efficiency information for cheese vats now more than twenty years old is simply wrong.

The statement in the 2002 decision, “The preponderance of the record indicates that most cheese manufacturers should be able to obtain a 90 percent butterfat recovery,” is true but only because it is too low. Not a single plant has complained about the yield. If 90% represented average butterfat recovery in cheese plants, then there would be someone on the short side. The only parties on the short side of this factor are producers.

Record evidence shows that Leprino, the largest manufacturer of Italian cheeses, utilizes **all** of its purchased butterfat, “So, ultimately all of our fat, all of our whey fat is reincorporated into the cheese.”⁷ Italian cheese makers account for approximately a third of the cheese produced in the U.S.⁸ Assuming the rest of the cheese manufactured recovers only 90% of their butterfat, the record evidence demonstrates that as much as 93.3% of all butterfat is recovered in all of the cheeses made from Class III milk.

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

In response to those who say that the CDFA yields on cheese cannot be used to approximate the butterfat recovery, IDFA/Leprino’s expert witness was asked if she were given the cheese yield, moisture percentage, percentage of fat, and percentage of casein, the butterfat recovery can be

⁶Taylor 2951.

⁷Taylor 2951.

⁸Taylor 2950-51.

calculated.⁹ She was given specific data for each of these. The amount of casein in a cheddar cheese plant can be approximated because the ratio of casein to butterfat in the vat is very close, generally around 70%.¹⁰ Thus the missing factor, casein, can be computed from the data as can the butterfat recovery. CDFA reports all of the data except percentage of casein annually. Reports for 2002,¹¹ 2003,¹² 2004,¹³ and 2005¹⁴ have been admitted into the record.

The information needed to calculate a butterfat recovery is all contained in CDFA's reports, with the exception of casein. Testimony at the hearing showed that a casein to fat ratio of approximately 70% was a proper vat mix.¹⁵ With a reported 4.02% butterfat for 2004, the amount of casein can be calculated at 2.814%. With that figure, the butterfat recovery for 2004 is 95.51%. Testimony at the hearing reported casein to fat ratios of 64% to 68%.¹⁶ Such ratios if used to approximate the amount of casein in CDFA data would result in even higher butterfat recovery to obtain the yields reported.

These are single vat recoveries and do not reflect the totality of butterfat recovery in the entire operation. Because all witnesses agreed that whey cream (that is the butterfat not recovered in the first pass) can be and is returned to subsequent vats, it is immaterial whether or not all cheese plants

⁹Taylor 2991-92.

¹⁰Yale 2255.

¹¹Ex. 33, FFF CDFA Cheese Processing Costs Released November 2003.

¹²Ex. 33, GGG CDFA Cheese Processing Costs Released November 2004.

¹³Ex. 33, HHH CDFA Cheese Processing Costs Released November 2005.

¹⁴Ex. 33, III Cheese Manufacturing Costs, Current Study Period: January through December 2005 with Comparison to the same time Period Prior Year (2004).

¹⁵Yale 2255.

¹⁶Brown 2916.

use it on all of the cheese they produce, the value is there if they wish to use it and producers should not be denied the value of butterfat because of plant choices. This is especially true when a third of cheese produced from Class III uses all of the butterfat in the cheese.

The mathematics of multiple passes with reuse of whey cream only increases the recovery rate. For example if the recovery is only 90% and the whey cream is reused, 95% of the first vat's butterfat ends up in finished cheese even when 75% of the whey cream is recoverable.¹⁷ Whey cream cannot be recycled indefinitely, but in the mean time the amount of butterfat ending up in finished product sold as cheese is much higher than current formulas acknowledge. When the plant's vat recovery is 92% such as Foremost Farms¹⁸ the total butterfat recovery only increases proportionately.¹⁹ When the butterfat recovery shown by the CDFA data is used, use of the whey cream raises the amount of butterfat ending up into cheese to near total. ($95\% + .75 \times 5\% = 98.375\%$).

In this way, the arguments of proponents for whey cream adjustment are unfounded. First there is very little whey cream actually produced (IDFA presented no data). More importantly when whey cream is sold it is the lesser valued whey cream that results from repeated recycling and, as a result, demands a lower multiple.

A cheese plant in California paid producers based on the Van Slyke formula, and utilized 78% of casein to crude protein and a 94% butterfat recovery.²⁰ Similar analysis for producers selling milk

¹⁷Brown 2651.

¹⁸Ex. 38.

¹⁹Taylor 2975-76.

²⁰Yale 1337.

to plants in other states where modern plants pay on a cheese yield formula, the implied yields reflect butterfat recovery in the same or higher range.²¹

In addition, the RBCS study supports a higher butterfat recovery. The RBCS study introduced at the 2006 hearing on make allowances reported a cheese yield of 10.4 pounds per hundredweight on all cheeses and 10.7 pounds per hundredweight on 40-pound blocks.²² Applying FMMO average tests of butterfat and true protein, 3.69% and 3.04% respectively, the results show a butterfat recovery of 95.25% for all cheeses.²³

Other academic papers and published studies support a butterfat recovery greater than 90%. Dr. Barbano's testimony from the 2000 hearing, introduced by IDFA, documents a 93% butterfat recovery.²⁴ In his text on cheese manufacturing, Vikram Mistry, a Professor of Dairy Science at South Dakota State University demonstrates the Van Slyke formula with a butterfat recovery of 93%.²⁵ Prior to the use of end product pricing, the USDA price support for cheese presumed 10.1 pounds of cheese for 100 pounds of milk at 3.67% butterfat which reflects a 92% butterfat recovery, and that was based on technology more than twenty years old. An advisory paper from the University of Wisconsin assumes a 93% recovery.²⁶

²¹*Id.*

²²Ex. 33, OOO, Charles Ling Testimony Ex. 18 in 2006 Make Allowance Hearing.

²³Ex. 33, PPP, Estimating Butterfat Recovery on RBCS Report.

²⁴Ex. 59, p. 6.

²⁵ Kosikowski and Mistry, *Cheese and Fermented Milk Foods*, Vol. 1, Third Ed. 1997, pp. 623-24, See Yale 1338-39.

²⁶Ex. 77, p.3.

Finally, manufacturers of cheese making equipment recognize and, in fact, promote butterfat recoveries significantly higher than 90%. In a proposal for a plant to purchase new vats, Scherping estimated butterfat recoveries in excess of 94%.²⁷

The Class III price for milk applies to all cheeses, not just American style. Discounting the protein price by use of 90% butterfat recovery rate provides a windfall for those, approximately one third, of the plants that use virtually all of the butterfat and an unwarranted bonus to the remaining plants. The Department, based on this evidence, should adopt a 94% butterfat recovery. Adopting a 94% butterfat recovery results in the following changes to the Class III pricing formulas. (1) The coefficient for the butterfat reducer rises from 0.90 to 0.94; and (2) The yield of cheese per pound of butterfat rises from 1.582 to 1.653.²⁸ As a result of these changes only, the formula would be: Protein = (Cheese Price - .1682)*1.383 + ((Cheese Price -.1682)***1.653** - **0.94***(BF Price))*1.17.

2. The percentage of casein in true protein should be based on average producer tests.

In the Final Decision from 2002, USDA stated that the percent of casein in crude protein was 78%.²⁹ The assumption was that one can compute the amount of casein in crude protein by simple multiplication. This is not true.

The traditional Van Slyke formula uses 78% of crude, or total, protein to determine the amount of casein in milk. The Department, beginning in 2000, began to use “true” protein as the value of the protein component. True protein is the difference between total protein and non-protein nitrogen (NPN).

²⁷Ex. 33, SSS, Scherping Proposal.

²⁸The derivation of these calculations can be referenced at Yale 1345, Ex. 33, TTT.

²⁹67 Fed. Reg. at 67928.

Calculating the casein in milk beginning with crude protein is accomplished as follows: find the percent casein is of true protein at the average producer test by deriving it from the Van Slyke formula. There is the known factor that casein is 78% of true protein.³⁰ That percentage times the total protein test determines the amount of casein. The amount of casein in milk of a given remains the same regardless of whether it is measured as a function of true protein or total protein. Evidence at the hearing showed that the 82.2% represents milk with true protein in excess of 3.56%.³¹ At standard test 2.9915% true protein, the value would be 83.25%.

Evidence at the hearing establishes that the amount of NPN is 0.19%.³² The amount of NPN as a percent of true protein varies, but NPN is a fairly static value irrespective of the value of total protein. Personnel at USDA AMS and Cornell determined that a fair factor for NPN is a relatively unchanging 0.19%.³³ The issue is at what level of true protein is the percentage determined.

The current formula implies 82.2% of true protein of all milk is casein. This is incorrect for producer milk at the average weighted tests in the market. Producers with less than 3.56% true protein are penalized by the inaccurate implied percentage in the current formulas.³⁴ (That is the point when 82.2% of true protein equals 78% of crude protein.) That is a full half a point of protein higher than the average true protein value in milk marketed in the FMMOs.

Basing the ratio of casein to true protein on the *weighted average* producer test is consistent with the USDA's use of the weighted average sales price reported by NASS. Further, the make

³⁰67 Fed. Reg. At 67928, Ex. 59, 6; Yale 1311.

³¹Ex. 33, DDD.

³²Metzger 1674, Yale 1310, Taylor 2995, Ex. 61.

³³Ex. 33, CCC, David M. Barbano and Joanna M. Lynch, "FAQ: Changing from Crude Protein to True Protein," May 14, 1999.

³⁴Ex. 33, CCC.

allowances surveyed by Stephenson and CDFA were extrapolated and merged on a weighted average basis. Finally, the use of a proxy that is on the weighted average insures that on the whole plants pay for all of the casein and producers receive no more than all of the casein though individual plant and producer results may vary.

With that in mind, the appropriate ratio of casein to total protein is 83.25% for milk at 2.9915% true protein and 83.10% for milk at the weighted average true protein test within the federal milk marketing orders. Applying this casein percent to the Van Slyke formula results in increasing the casein factor in the cheese yield formulas from 1.383 to 1.405.³⁵

3. The Fat to Protein Ratio in the butterfat adjustment to the protein component price should also be based on average producer tests.

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

The current cheese to protein formula adjusts the simple protein component price to act as a residual to the difference between the Class IV butterfat and the value of butter used in cheese. In simple terms, the difference between the two different butterfat values will be carried by the protein so that the overall value of Class III at test will not change as a result of changing the butterfat value. Since the adjustment is being stated per pound of protein and there is less protein than butterfat, the rate of adjustment, first computed as per pound of butterfat, has to be increased so that on the fewer pounds of protein the same total value is adjusted.

The current formula uses the ratio of 1.17. This represents the ratio of standardized tests of 3.5% butterfat and 2.9915% true protein. The problem with that ratio is that average tests for

³⁵The derivation of this factor can be found at Yale 1313-15, Ex. 33, EEE.

butterfat and protein are 3.69% and 3.04% respectively.³⁶ This represents a ratio of 1.214, not 1.17.³⁷ Having the ratio incorrectly set at the standardized tests effectively undervalues milk at test for more than one half of the producer milk marketed in the FMMO system.

4. Summary of changes to the cheese to protein formula

DPNM proposes that the following findings and conclusions be adopted:

1. The standard for determining yields is the Van Slyke formula.
2. The Van Slyke formula for cheddar cheese is as follows:

Pounds of Cheese = $((BR\% \times BF \text{ lbs}) + (CS\% \times PR \text{ lbs}) - 0.1) \times 1.09 / (1 - \text{Moisture}\%)$

Pounds of Cheese from Butterfat = $(BR\% \times BF \text{ lbs}) \times 1.09 / (1 - \text{Moisture}\%)$

Pounds of Cheese from Protein = $((CS\% \times PR \text{ lbs}) - 0.1) \times 1.09 / (1 - \text{Moisture}\%)$

3. NASS survey prices are based upon the weighted average price.
4. Make allowances are based upon a weighted average of surveyed plant data.
5. The casein percent of true protein factor in the cheese to protein component formula should be based on the weighted average protein tests of producers.
6. The Van Slyke formula is based upon the amount of casein in crude or total protein and uses 78% of total protein for the amount of casein.
7. The difference between total protein and true protein is non-protein nitrogen or NPN.
8. The amount of NPN in total protein cannot be expressed in terms of a percentage.
9. The amount of NPN is fairly narrow and varies little as total protein goes up or down and is best expressed as 0.19%.

³⁶Ex. 33, OO and Ex.33, P.

³⁷Ex. 33, UUU Ratio of Butterfat to True Protein at Various Tests.

10. The average true protein test for all orders was 3.05% and for milk used in Class III was 3.04%.
11. The only time in which 82.2% of true protein equals 78% of crude protein is when the true protein test is 3.56%.
12. The Department should adopt a protein formula that uses 83.25% of the true protein.
13. The factor for yield of cheese from a pound of protein should be 1.405.
14. The weighted average of butterfat and true protein in the FMMO system is 3.69% and 3.04% respectively or a ratio of 1.214 to 1, not 1.17.
15. The multiplier of the butterfat adjuster for the protein price should be 1.214.
16. The butterfat recovery in cheese is higher than the implied 89.4% now being used in the formula.
17. The actual higher butterfat recovery in plants means that plants are not paying for all of the protein used to make cheese.
18. The 90% butterfat recovery implied in the current cheese to protein formula is too low to represent current industry practices, reported yields, and academic reports.
19. Leprino recovers all of the butterfat in its cheese plants.
20. Italian style cheeses represent about one third of the cheese produced from Class III milk.
21. Assuming that all other cheese makers recover 90% of the butterfat, that means, at a minimum, that on the average users of Class III milk use 93.3% of the butterfat in cheese.
22. The butterfat recovery of plants reported by CDFA can be approximated by calculating the amount of casein in the vat as a percentage of the butterfat.
23. The butterfat recovery of plants reported by CDFA approximates 95.51%.

24. Cheese plants paying producers on end product pricing use formulas with implied butterfat rates of 94%.
25. The RBCS study gave yields of cheese that suggested butterfat recovery rates on average FMMO milk at 95.25%
26. Dr. Barbano testified in 2000 that 93% recovery was at least recoverable today.
27. Manufacturers of cheese vats promote butterfat recovery in excess of 94%.
28. Subsequent use of whey cream in the vat substantially increases overall butterfat recovery and reduce unused whey cream.
29. The yield of cheese per pound of butterfat should be 1.653 instead of 1.582 and the adjustment for the Class III to IV butterfat should be .94.
30. The cheese to protein formula should be

$$\text{Protein} = (\text{Cheese Price} - .1682) * 1.405 + ((\text{Cheese Price} - .1682) * 1.653 - .94 * (\text{BF Price})) * 1.214$$

B. The yield for nonfat dry milk should be corrected.

The Department should correct the NFDM to SNF yield to reflect actual yields. Currently the multiplier is 0.99. This states an impossibility. NFDM is the product of removing water from pasteurized skim milk. The resulting powder may not “contain more than 5 percent by weight of moisture”.³⁸ Because of the cost of drying as well as the fact that the moisture is less valuable than the powder, the expectation is that NFDM will be sold at nearly 95% dry matter. In the case of Extra Grade the moisture is lower, 4.5%. The solids not fat (SNF) component price for the FMMO pricing system is based upon dry matter with no moisture. But the current formula implies that NFDM is *drier* than the SNF. According to the standards of identity, one pound of SNF will produce as much as 1.05 pounds of NFDM. It is impossible to produce less than a pound as the

³⁸Ex. 33, UU Std of Identity for NFDM, 21 C.F.R. §131.125.

current formula contends. NFDM is approximately 3.2% moisture. Thus the Final Rule represents a loss of 5.2 pounds of nonfat milk solids in every 100 pounds of NFDM or a 5% loss.

Prior to the Final Decision effective 2003, the formula was a multiplier of 1. USDA in setting the NFDM yield to the current 0.99 stated:

This final decision also changes the divisor from 1 to 0.99 in order to account for farm-to-plant losses of nonfat solids and to simplify and provide consistency to price formulas. Nonfat milk solids in buttermilk are removed from the computation of the Class IV nonfat solids price.³⁹

The farm-to-plant losses are addressed elsewhere in this brief. In any event a 0.15% loss of solids as alleged but not proved would reduce the yield from 1.05 to 1.048, not 0.99. As for the simplification and consistency, any number can act as the numerator and maintain the consistency and simplification of multiplying the yields rather than using a divisor.

The removal of buttermilk solids from the formula is also unwarranted. Such provide marketable powder for which plants receive money that offsets their costs. The output from such a plant, output paid for by the make allowances included in the formula, is not only powder and butter, but condense and buttermilk both bulk and powder.⁴⁰ Studies of powder plant operations show buttermilk as an output.⁴¹

CDFA examined actual yields in butter powder plants. It found the yields of NFDM, not including buttermilk to average 1.025.⁴² It would indeed be ironic for the Department to pick and

³⁹67 Fed. Reg. 67906, 67921.

⁴⁰Ex. 9.

⁴¹Ex 33, XXX Excerpts from Stephenson and Novakovic, Determination of Butter/Powder Plant Manufacturing Costs Utilizing an Economic Engineering Approach, June 1990, A.E. Res. 90-6 and excerpts from Stephenson and Novakovic, Manufacturing Costs in Ten Butter/Powder Processing Plants, September 1989, A.E. Res. 89-12.

⁴²Ex. 33, YYY CDFA Butter and Powder Yields, 1998.

chose the CDFA make allowances for powder plants but turn a blind eye to CDFA's study of plant yields.

Plants today certainly are not less efficient. All of these studies show a combined NFDM and buttermilk powder yield in excess of 1.025 pounds of product from each pound of solids non fat. However, buttermilk powder is slightly less valuable than NFDM and so we are proposing a yield of 1.02 pounds of SNF in each pound of finished product.

Thus the formula for NFDM before adjusting for the make allowance should be:

$$\text{SNF} = (\text{NFDM} - 0.1570) * 1.02$$

III. Proposals dealing with farm-to-plant shrink.

A. Farm-to-plant shrink should be eliminated from the pricing formulas.

DPNM's proposal seven would eliminate the farm to plant shrink adjustments from the pricing formulas for the following reasons: (1) eliminating farm to plant shrink will result in a minimum pay price premised on the modern reality that true farm weights are equivalent to plant weights; (2) eliminating farm to plant shrink from the formulas will end the subsidization of those producers whose farm weights and tests are inaccurate and erroneous; and (3) eliminating farm to plant shrink will put an end to prices that are reduced unnecessarily because the manufacturing formulas are the basis for the Class I and II pricing formulas.

Historically, inclusion of a farm to plant shrink was considered reasonable because tankers were making many stops before arriving at the plants and there was inconsistency between farm weights and plant weights. But today, over half the milk in the country is produced on farms that have more than 500 cattle and, therefore, can deliver a full tanker of milk. This leads to greater specificity and accuracy in the observation of the milk picked up at the farm. Although DPNM recognizes that in some instances, milk haulers still have several stops on their route, but this is increasingly the exception and not the rule. And, the net of all overages and underages between farm weights and

tests and plant weights and tests is a wash today. In almost all instances, the difference between the farm weights and tests and the plant weights and tests is significantly less than the 0.25% assumed by the federal milk marketing order presumptions. If there is a consistent error, steps are taken to identify the source of the difference and to correct it.

To maintain its relevance, the federal order system needs to recognize the changing technologies and efficiencies in milk production and marketing. Producers should be fairly compensated for increasing their efficiencies. Maintaining a farm to plant shrink adjustment in the pricing formula penalizes those producers who have become more efficient and caters to those who could become more efficient, but decline to do so.

A basis for the 2002 Final Decision was that “the shrinkage provision allows assigning a value to milk losses at the lowest priced class, providing explicit recognition that some milk loss is inevitable in farm-to-plant movement.”⁴³ But in the modern dairy industry, milk loss is not “inevitable” and those who are inefficient should not be rewarded by subsidies from those who have solved the problem.

The Department also said in the Final Decision, “The loss allowances in the Class III and IV formulas are intended to reflect actual losses that are beyond the processing handler’s ability to control.”⁴⁴ But these losses are within the processing handler’s control. A handler can refuse to accept milk from shippers that demonstrate unacceptable farm to plant losses. The handler can request assistance from the market administrator to check the tanks and the testing methods. The handler can contract for milk based on farm tests without shrink, and adjust their payments accordingly.

⁴³67 Fed. Reg. at 67917 (November 7, 2002).

⁴⁴*Id.*

Additionally, the Department stated,

Prior to Federal order reform, milk pricing for all Federal milk marketing orders relied on the Grade B Minnesota-Wisconsin (M-W) price series and later the Basic Formula Price (BFP). These prices were determined by manufacture milk plant survey reports of Grade B milk purchases free of government price regulation and represented a competitive pay price for milk. The competitive pay price factored the entire cost of processing milk purchased from farms into finished dairy products. In contrast to the competitive pay prices, federal order reform could no longer rely on a competitive pay price and purposefully chose NASS surveys of end-product prices and sales to establish Class III and IV prices with product price formulas. Many of the plants reporting to NASS purchase large quantities of milk from individual producer cooperatives. The end-product pricing formulas developed under reform were based in part upon the cost to process raw milk into finished dairy products.⁴⁵

The basic contractual relationship described in the Final Decision has not changed. Cooperatives can still negotiate with their members and pay them on actual milk deliveries. Proprietary handlers can refuse to accept milk from producers with excessive losses.

The elimination of farm-to-plant shrink is implicit in the formula proposals by DPNM throughout this brief.

B. A mathematical error in the calculation of the butterfat yield needs to be corrected.

Proposals 6 corrects a mathematical error in the computation of the butterfat factor by proposing an increase in the yield factor for butterfat to butter from 1.20 to 1.211. This proposal corrects for a mathematical error in the Department's calculation of "shrinkage." In the Final Decision establishing the Class III and IV pricing formulas from November 2002,⁴⁶ the Department made substantial reductions from the yields in the Recommended Decision of October 2001⁴⁷ by including, for the first time, adjustments for "shrinkage." Because these changes were included in the Final

⁴⁵*Id.*

⁴⁶*Id.* at 67906.

⁴⁷66 Fed. Reg. 54064 (October 25, 2001).

Decision but not in the Recommended Decision, interested parties were not provided an opportunity to respond to the changes.

Assuming for the moment that shrinkage should be accounted for in the formula, the assumed shrinkage was improperly calculated. The error is explained by the following: Assuming that overall milk volume at the farm is reduced by 0.25% in transportation and fat is further reduced by 0.015 pounds per 100 pounds of milk received at the plant, the milk at the plant is the farm volume adjusted for shrink in accordance with this formula: $(3.5 * 0.9975) - 0.015 = 3.47625$.

But the Department assumed that the plant lost 0.015 pounds of fat per pound of fat, not per hundredweight. The formula used by the Department was, as a result, $(3.5 * (0.9975 - 0.015))$ or $(3.5 * (0.9825)) = 3.43875$. A comparison of the correct formula with the Department's formula demonstrates that the Department has incorrectly placed the second set of parenthesis in its formula.

Correct Computation $((3.5 * 0.9975) - 0.015) = 3.47625$

Department Computation $(3.5 * (0.9975 - 0.015)) = 3.43875$

By placing the parenthesis in the wrong place, USDA assumed that the plant received less butterfat than it actually does. When the Department then calculated the yield of butterfat from one pound of butter, it arrived at 1.2 instead of the correct yield of 1.211.⁴⁸ IDFA agrees that there is an error in the application of shrink to the butterfat formula but wants no change.⁴⁹

DPNM proposes the following findings and conclusions:

1. The Department made a mathematical error when it applied shrink to the yield of butterfat in butter in the 2002 Final Decision.

⁴⁸The derivation of these figures can be found at Yale 1345, Ex. 33, TTT.

⁴⁹Taylor 2490-92.

2. The Department calculated a yield of 1.20 pounds of butter from a pound of butterfat when it should have calculated a yield of 1.211.

IV. Make Allowances Should be Set Using Data from the September 2006 Cornell Survey Only.

Dairy Producers of New Mexico have offered proposal three to set make allowances at the following levels: butter 11.08 cents per pound, nonfat dry milk 14.10 cents per pound, cheese 16.38 cents per pound, and dry whey 14.98 cents per pound. The rationale behind proposal three is to set make allowances at levels consistent with the weighted average make allowances surveyed by Cornell University and reported at the last make allowance hearing in September 2006. The only exception is the make allowance for dry whey, which would be set at the observed weighted average price for dry whey, plus 0.9 cents to account for the additional energy needed to dry whey.

DPNM opposes all other noticed proposals related to make allowances. Based on the following principles:

- The data used to determine the appropriate level of manufacturing allowances for establishing federal order prices should be drawn from plants operating within the federal order system.
- Adjustments to federal order pricing regulations should always be subject to formal rulemaking.
- Make allowances should be set at a level deemed appropriate by the Secretary, after taking into consideration all statutorily required factors and the then-current milk marketing conditions, rather than prescribed geographic or volumetric factors.

DPNM has offered proposal three so that make allowances can be set at levels that are known to exist in federally regulated plants, without influence from plants regulated by the California system. The current make allowances incorporate make allowance data compiled by the California

Department of Food and Agriculture. DPNM does not take issue with the methodology employed by CDFA. In fact, in light of the testimony offered in this proceeding, the CDFA data and methodology is clearly more complete and accurate than any of the data compiled and presented by Cornell relevant to plants located in other areas of the nation.

V. Proposals one, two, and 17 should not be adopted.

Because DPNM opposes the use of data from plants not regulated by the federal milk marketing orders, DPNM opposes the adoption of proposals that would incorporate additional data from the California Department of Food and Agriculture, as it is our long-standing position that data from plants in California is not appropriate for inclusion in formulas setting minimum prices in the federal milk marketing orders. For this reason we oppose Agri-Mark's proposal one.

DPNM argued in its proposed findings and comments the last time that the Department examined make allowances that data from CDFA is not relevant to costs at federally regulated plants. Our brief in October 2006 stated:

The California study, a virtual census of manufacturing costs for plants in California, cannot be used because it only reflects costs in California and those costs are admittedly higher than in the rest of the country. The California data also reflects a different mix of plants than in the FMMO system both in terms of products, but also markets, location of milk to plants, and costs. To the extent that California's industry has an impact on national pricing, that is captured in the NASS survey which properly incorporates by implication the California cost data. Finally, CDFA uses these audits along with audits of producer costs to establish policy on level of producer pricing. USDA does not have this data.

The Department first included CDFA cost data to counterbalance the RBCS survey data that the Department has since abandoned in establishing make allowances. With the Department's policy decision to move away from RBCS, the need to maintain California data in the make allowance calculation has also passed.

In addition to including updated data from California, Agri-Mark seeks to update make allowances using the most recent data from Cornell's plant survey. When first presented in

September 2006, the Cornell survey could be described as a thoughtful, though not perfect, attempt to arrive at reasonable approximations of manufacturing costs outside of California. But the version cobbled together and rushed to Pittsburgh at the behest of its product-manufacturing commissioners amounts to a regulatory Rorschach test. This data is so muddled and susceptible to selection and interpretation that regardless of the use to which the Department puts the numbers, they are bound to be wrong.

Here is a brief summary of what the 2007 version of the Cornell study included and how it differs dramatically from the 2006 survey.

- Some plants that did not submit data for the 2006 study submitted data from the 2007 study and some plants that participated in 2006 did not submit data in this survey.⁵⁰
- Three plants not included in the 2006 study were high-volume, low-cost plants, and that when those plants were included, the make allowance for cheese actually declined.⁵¹
- Of the sixteen cheese plants that participated in the Cornell study reported in 2006, their costs increased by 1.7 cents.⁵² For all plants participating in 2007, the cheese plant costs fell by approximately one-half cent.⁵³
- 54% of the NFDM in the 2006 Cornell study came from NDA's plant.⁵⁴
- USDA requested and paid for the 2006 study. The 2007 study was requested by

⁵⁰Stephenson 2748.

⁵¹Ex. 72, Stephenson 2750.

⁵²Ex. 72, p. 6, Stephenson 2793.

⁵³Ex. 72, p.5.

⁵⁴Brown 2933-34.

and paid for by Agri-Mark and others.⁵⁵

In 2006, Dr. Stephenson statistically modeled and extrapolated a make allowance for cheese. He advocated that USDA premise make allowance on this model, rather than his survey, because large plants were over sampled in 2006. The following exchange between Dr. Stephenson and counsel for IDFA is from the presentation of the 2006 Cornell study:

Q. By the methodology you chose, and the result is that if one calculates a weighted average cost of producing cheddar cheese, the focus is only on the 16 sample plants, you are coming up with a weighted average cost based upon a sample population that is substantially overrepresented by larger plants, correct?

A. That's correct.

Q. And if one assumes that the larger plants are the most efficient, then the result would be that a weighted average cost of producing, based solely on the 16 sample plants, will substantially underestimate the weighted average cost of producing for the total population of all cheddar cheese plants located outside of California is that correct?

A. That's a correct statement.⁵⁶

Thankfully, the Department rejected his statistical extrapolation. Because, in Pittsburgh, Dr. Stephenson took exactly the opposite position about the exact same survey:

Q. Is it still your view that that kind of refitting produces the best number?

A. I think that it probably does because the last time [2006] we had an over sampling of smaller plant[s] in the survey. This time [2007] I think we have an over sampling of larger plants in the survey.”⁵⁷

This inexplicable about face was accompanied by the revelation that the testimony from Dr. Stephenson about the number of large plants in the survey in Strongsville in 2006 was erroneous. There, Dr. Stephenson led the hearing participants to believe that of the 16 cheese plants that

⁵⁵Stephenson 2748-49.

⁵⁶Stephenson Testimony from 2006 Hearing, September 14, 2006, 80-81(appended hereto).

⁵⁷Stephenson 2779.

submitted surveys, five were large plants, “We had full participation from the largest plants, the 5 largest plants that were polled, and we had less than full participation or final participation from the other 15. . .”⁵⁸ But in Pittsburgh, he testified that only one plant in the 2006 survey was “large.”⁵⁹ Somewhere along the line, Dr. Stephenson reported mistaken testimony on the plants included in the survey, and the results are not harmless. If the author of the study cannot even provide reliable testimony about the stratification of the participants, how can the Department rely on the statistical extrapolation of that data?

But we must wonder, what would be the result if the three plants that did not participate in 2006 but participated in 2007 were reported in the 2006 Strongsville hearing. The record evidence demonstrated that the larger cheese plants, only one of which was included in the 2006 survey, had plant costs of approximately ten cents per pound. The smart money would bet that the make allowance for cheese would have been lower had these larger, more efficient plants been included.

Now, Dr. Stephenson, prompted by the very participants who have retained Cornell to update the survey for them, suggests that his new survey, which contains fewer observations is better than the 2006 survey. But nothing has changed, except that now we know that the survey is far less precise and accurate as we thought it was last year. What we have is not useful and reliable information about plant costs, but make-what-you-want-out-of-it data rushed to presentation to satisfy those who commissioned the study. The Department should reject the requests to incorporate this poor data into the make allowances.

DPNM opposes the adoption of any proposal that would adjust make allowances, or any element of the make allowance component, automatically or without hearing. We oppose the

⁵⁸Stephenson Testimony from 2006 Hearing, September 14, 2006, 46 (appended hereto).

⁵⁹Stephenson 2791-92.

adoption of proposal two or any other like regulations that would automatically update make allowances specify a defined quantity of milk production, plant capacity, or a geographical snubber that must be adhered to.

We understand the concern of some in the industry that the hearing process takes too long. But the longevity of the federal milk marketing order system, in our opinion, can be attributed to the participation of interested parties in the presentation of evidence, cross-examination of witnesses, and opportunity for the industry to present data for the Department's consideration. Absent a survey methodology that is more comprehensive than the current Cornell model, provides for a clear and comprehensible statistical method for extrapolating the survey results, guarantees appropriate representation across geographic areas and plant sizes, and compels the participation of the plants drawn to participate, the Department should decline to entrench it in the federal orders.

In any event, the testimony of Dr. Stephenson in Pittsburgh establishes that the methodology of the Cornell study is terribly nebulous. As we have explained, the Cornell study does not provide the Department a sufficiently sound methodology to obtain complete, accurate, and reliable information about make allowances. This survey should not be incorporated into any automatic update until it is further fine-tuned and demonstrated to be complete and accurate, which it is not now.

DPNM opposes the adoption and incorporation of an energy adjustor, as proposed by National Milk Producers Federation. There is little reason to segregate a single cost element from the myriad of factors involved in the make allowance formula. Testimony from several witnesses expressed a desire that the price formulas not be made any more complex because, among other reasons, purchasers of dairy products needed to have predictability about their product costs.⁶⁰

⁶⁰Yonkers 978, 987, McCully 1147, Carlson 2408, Latta 2420-21.

Injection of monthly adjustments to the energy component of the make allowance formulas will only add to this complexity and should not be adopted.

VI. Balancing costs cannot be determined on a national basis.

It has been suggested that the Department should consider "balancing costs" and "market clearing values" when setting make allowances. But balancing costs vary from market-to-market within a single order and certainly from order to order. The hearing record does not support this approach. To incorporate balancing costs in the pricing formulas would necessarily involve pure speculation. A cooperative that believes that it is carrying an undue burden in balancing costs has several options. It can organize all of the milk in the order and permanently and completely deal with the issue (Southwest Order), it can refuse to carry those costs and let the market adjust, or it can seek market service payments under the order that address those costs.

It is absurd to consider that producers in the Southeast, or Florida or the Southwest or Arizona must take reduced income from plants in those markets because some cooperatives in some regions want some money to cover their balancing costs in those regions. It makes no economic sense whatsoever.

DPNM proposes the following findings and conclusions:

1. Balancing costs are specific to each market.
2. Balancing costs are handled diversely in different markets.
3. Component and class pricing in the FMMO system is done on a national basis.
4. Because balancing costs present regional considerations and pricing reflects national considerations, balancing costs should not be incorporated into pricing decisions.

VII. Price Data from the CME should be utilized instead of NASS surveyed prices

for cheese, butter, and NFDM.

In 1999, DPNM advocated the utilization of Chicago Mercantile Exchange sales data instead of NASS surveyed data to establish the pricing series used to set component and minimum prices. Our proposal 15 would replace the use of the NASS survey to determine the sales prices of butter, nonfat dry milk. And cheddar cheese with data compiled from the daily prices on the CME. Proposal 15 would maintain the use of NASS survey prices to establish sales prices for dry whey.

Earlier this year, the concerns about market manipulation of the NASS survey prices by those handlers reporting prices became an expensive reality for dairy producers. It is obvious that if prices for nonfat dry milk sales were taken from the CME rather than the NASS survey, this error would have been prevented. There would be no question about what sales needed to be included. There would be no guessing about whether prices were submitted forthrightly or whether shenanigans were taking place. There would be no need to audit the umbers. The CME is transparent.

The General Accountability Office has now endorsed our argument in favor of CME data.⁶¹ The GAO concluded that the CME prices establish the prices for cheese sales contracts in the United States.⁶² GAO observed that the NASS survey is not audited, covers the same sales as the CME, and is not timely.⁶³

GAO concluded that:

To improve the timeliness of reported cheese prices and reduce redundancy that exists in the NASS survey of cheddar cheese, we recommend that the Secretary of USDA direct the Administrator, Agricultural Marketing Service to give serious consideration to all proposals, in consultation with the industry, including the

⁶¹Ex. 77.

⁶²Ex. 77, p. 3.

⁶³Ex. 77, p. 4.

industry proposal to use the CME spot cheese market prices instead of the NASS survey of cheese prices in the minimum federal milk pricing formula.⁶⁴

GAO also addressed the potential problems associated with the use of CME, such as the thinness of the cheese market and the possible manipulation of CME cheese prices. The GAO report properly points out that because the NASS survey captures the same price transactions as the CME, maintaining use of the NASS survey does nothing to address any potential manipulation.⁶⁵ In addition, CFTC and CME provide oversight over CME transactions.⁶⁶ That is, use of the CME can make things no worse than we have now. In fact, the transparency and lack of need for audit make the use of CME clearly preferable to the continued use of the NASS survey.

VIII. Use of CME price data for sales of cheddar blocks can obviate the need for a block-barrel spread.

While our proposal 15 was noticed to survey the CME prices for both 40-pound cheddar blocks and 500 pound cheddar barrels, our intent was the use of only 40-pound block prices from the CME. If the Department adopts the proposal as intended, then there would be no need to have additional debate over the existence or amount of a “block-barrel spread.” But assuming that the Secretary elects to maintain the use of the NASS cheese survey, the current block barrel price spread should be maintained.

When the Department adopted the current price formulas, it explained that the purpose of the three-cent barrel price adjustment approximates the historical difference in cost of “manufacturing and packaging the two sizes of cheese” and that in the 22 month period before the

⁶⁴Ex. 77, p. 28.

⁶⁵Ex. 77, p. 5.

⁶⁶Ex. 77, p. 13-21.

Department's hearing on pricing formulas in 2000, the price spread averaged 4.4 cents.⁶⁷ As presented in testimony from Agri-Mark, the spread observed by the Department has narrowed. But the spread is not consistently less than three cents.

The argument offered by IDFA and its members in this proceeding is that current conditions do not support the maintenance of the barrel price add-on. It is true that the evidence presented demonstrates that the spread between block prices and barrel prices has moved since the spread has been implemented.⁶⁸ Since the start of 2006 through July 2007, the NASS surveyed block price has exceeded the barrel price in 38 of 83 weeks, with a spread as great as 3.85 cents and with block prices exceeding barrels for each week in July 2007.⁶⁹ Given the variability in block and barrel prices and the unpredictability of prices from week to week and month to month, the *status quo* should be maintained if the Department elects to include survey prices from both commodities.

IX. The competitive pricing proposal from the Maine Dairy Industry Association deserves serious consideration and further development.

Competitive prices have always been preferred by DPNM over end product pricing. The MDIA proposal is an excellent start toward a framework that might just be the last, best hope for the future of the FMMO. Given the context of this hearing, and the timing of the MDIA presentation, however, the full implications of moving to this, or any other, competitive pricing system has not been developed in the record.

DPNM requests that the Secretary, regardless of the decision resulting from this hearing, take steps to take further comment and proposals regarding a competitive pricing model and notice a

⁶⁷65 Fed. Reg. 76832, 76845 (December 7, 2000).

⁶⁸Wellington 856.

⁶⁹Source: AMS Milk Marketing Order Statistics Public Database:
<<http://apps.ams.usda.gov/USDAMIB/PreparedReports/DisplayReport.aspx?ReportName=NASS%20Weekly%20Product%20Prices%20Final&Log=True>>.

hearing to replace end product pricing with a competitive price system. DPNM believes that there is ample evidence in the record to conclude that the end-product pricing experiment is fraught with the need for constant hearings to set make allowances, product yields, and pricing series and that a new start is needed.

X. There should not be a reduction for whey butter.

DPNM opposes proposals nine and 16 and any changes to the pricing formulas that would incorporate a reduction for whey butter. When the Department adopted the end-product pricing formulas in 2002, it declined to adjust for whey cream values. Undoubtedly, whey cream commands a lower value than sweet cream. But at the Department recognized in 2002, and the record evidence in this hearing establishes, a significant percentage of whey cream is returned to the vat and incorporated into cheeses—both cheddar and mozzarella. Whey cream can also be used to produce ricotta cheese, and Agri-Mark utilizes some whey cream in their butter to enhance flavor.

There is no national or published data that indicates the volume of whey cream sold or the price it is sold for. Anecdotal evidence from one or two plants benefitting from the proposal is insufficient to reduce producer value in protein.

XI. The National All-Jersey Proposals on Whey should not be adopted.

DPNM supports National All-Jersey's proposal that USDA begin collecting data on the prices, manufacturing costs, and volumes of whey protein products and lactose. But we do not support the proposal as an amendment to proposal two that would be automatically incorporated into any aspect of the minimum pricing formulas.

DPNM appreciates National All-Jersey's proposal 16, which would value dry whey on a protein basis rather than on an other solids basis. But as the NAJ witness testified, pricing of dry

milk products, including whey products has undergone a significant increase since this hearing began. The industry cannot know whether these increased prices, and the product processing decisions that result are a temporary market blip or a radical change in prices driven by demand. Accordingly, DPNM cannot support proposal sixteen at this time. Although, it may be appropriate to revisit this issue in the future. DPNM notes that the exploration and adoption of a competitive pricing system would render this discussion, and many of the other discussions in this hearing moot, and DPNM would prefer a sound competitive pricing system over additional revisions to the end-product pricing formulas.

XII. The Dairylea proposal to eliminate circularity and other problems inherent in the current regulations should not be adopted.

DPNM agrees with Dairylea that the circularity of dairy pricing under the current mechanisms must be addressed, and we think that proposal 20 is a well-intentioned attempt to address that issue for the benefit of processors and producers. It is therefore with reluctance that we cannot support their proposal 20. We share concerns of several testifying witnesses that the Dairylea proposal adds a further level of complexity to the federal order formulas that is as undesirable as the problems that Dairylea seeks to remedy. Rather than add additional adjustment to the end product pricing formulas to end circularity, DPNM believes that a superior solution is to announce the Department's intent to move toward a competitive pricing model, after additional study and development.

XIII. Conclusion.

If no other conclusion can be drawn from this record, it is that end product pricing is an experiment that has failed. The pricing formulas have grown increasingly complex. Both producers and handlers have legitimate concerns about the accuracy of the formulas. There is general

disagreement as to what pricing series should be used. There is vast disagreement on the appropriate level of make allowances. There is disagreement over whether yields should be adjusted. There are proposals to add more data to NASS collection. There is a suggestion to begin incorporating whey protein concentrate and lactose prices in the pricing formulas. And there are proposals to allow cost add-ons to avoid circularity and price reporting. For the most part, data available to set the factors in the pricing formulas is unavailable, incomplete, or unreliable. And in all likelihood, we will be back to have another hearing like this in three to five years

Regardless of the decision that results from this hearing, the Department is certain to leave someone with the short end of the stick. And those on the short end will have a legitimate grievance against the Department.

Obviously, Dairy Producers of New Mexico, Select Milk Producers and Continental Dairy Products support and urge the Department to adopt their proposals. There is ample reliable evidence in the record to adopt each and every one of their proposals. And since the industry will be dealing with end product pricing formulas for the foreseeable future, the adoption of proposals 3, 6, 7, 8, and 15 is in the best interest of the federal orders.

But what the industry really needs is a commitment to establishing an entirely new pricing structure. The proposal from the Maine Dairy Industry Association to establish a competitive pricing system may be exactly what the industry needs to move away from product pricing. The evidence in support of the Maine proposal, however, is insufficient for the Department to adopt it at this time. The industry would be well served if the Department called for additional proposals and comments on the Maine Dairy Industry Association proposal and subsequently called a hearing to address the narrow issue of moving to a competitive price system.

Respectfully submitted,

/s/ Benjamin F. Yale

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VOLUME V

BEFORE THE SECRETARY OF
THE UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICES

In the Matter of Proposed) Docket Numbers
Amendments to Tentative) A0-14-A74, et al.,
Marketing Agreements) DA-06-01
and Orders.)

National Public Hearing
Thursday, September 14, 2006
8:36 o'clock a.m.
Holiday Inn Select
15471 Royalton Road
Strongsville, Ohio 44136

BEFORE:

JUDGE VICTOR W. PALMER
US ADMINISTRATIVE LAW JUDGE
UNITED STATES DEPARTMENT OF AGRICULTURE

1 JUDGE PALMER: Dr. Stephenson?

2 MARK W. STEPHENSON

3 having been first sworn by the judge, was
4 examined and testified under oath as follows:

5 JUDGE PALMER: And do we have
6 copies of --

7 MS. DESKINS: I believe there's
8 copies at the back of your --

9 THE WITNESS: There are copies of
10 my testimony in the back.

11 JUDGE PALMER: Somebody standing
12 up there, could you get one for me and one for
13 the reporter? It would help us both.

14 (Thereupon, a discussion was held off
15 the record.)

16 (Thereupon, Exhibits 75 and 76 were
17 marked for purposes of
18 identification.)

19 JUDGE PALMER: Back on the record,
20 then.

21 DIRECT EXAMINATION

22 BY MS. DESKINS:

23 Q. Dr. Stephenson, could you please state your
24 full name for the record?

25 A. My name is Mark W. Stephenson.

1 were randomly selected from the largest 10
2 percent in the country. But you end up only
3 with data from 16 cheese plants. Were the 5
4 largest plants that were included, were they
5 part of the 16 plants?

6 A. Yes. We had full participation from the
7 largest plants, the 5 largest plants that were
8 polled, and we had less than full participation
9 or final participation from the other 15.

10 Q. Is this one factor that may lead to a
11 disproportionate representation of the larger
12 plants?

13 A. To some extent certainly, it is; however,
14 even by design, we had oversampled the larger
15 plants from the population. And the reason for
16 that was if we had simply taken a random draw
17 from the population, it was felt that we would
18 have a great deal of information about
19 relatively small plants, but perhaps pretty thin
20 or sketchy information about larger, more
21 efficient operations. So that's why we chose to
22 oversample larger plants.

23 Q. Were all the whey powder facilities in the
24 survey associated with cheese plants in the
25 survey?

1 Q. Your effort was to have 15?

2 A. Effort was to have 15.

3 Q. But the reality was you had 11, correct?

4 A. Correct.

5 Q. So that for stratum one, you had something
6 like -- I'm doing the math very roughly -- but
7 something roughly like 40 percent of the plants
8 that fall within the largest 10 percent were in
9 your survey sample, and something less than 10
10 percent of the plants in the, what I called
11 stratum two, participated, correct?

12 A. That's correct.

13 Q. Okay. And so as a result, you obviously
14 were substantially oversampling the largest
15 plants, and purposely so?

16 A. Purposely so.

17 Q. By the methodology you chose, and the
18 result is that if one calculates a weighted
19 average cost of producing cheddar cheese, the
20 focus is only on the 16 sample plants, you are
21 coming up with a weighted average cost based
22 upon a sample population that is substantially
23 overrepresented by larger plants, correct?

24 A. That's correct.

25 Q. And if one assumes that the larger plants

1 are the most efficient, then the result would be
2 that a weighted average cost of producing, based
3 solely on the 16 sample plants, will
4 substantially underestimate the weighted average
5 cost of producing for the total population of
6 all cheddar cheese plants located outside of
7 California; is that correct?

8 A. That's a correct statement.

9 Q. Okay. And so that if the goal of USDA were
10 to determine, for purposes of setting the make
11 allowance, what the weighted average cost of
12 producing is for all commercial cheddar cheese
13 plants outside of California, it would be a
14 mistake to rely upon the weighted average cost
15 of producing for the 16 sampled plants; is that
16 correct?

17 A. If that were the goal, yes, that would be
18 correct.

19 Q. But there is a way to correct for
20 that -- strike that.

21 There's a way to adjust the sampled data in
22 order to determine what is, in fact, the
23 weighted average cost of producing for all
24 cheddar cheese plants outside of California,
25 correct?

1 A. Given the information that I have
2 available, yes, I think we can do better than
3 just the sample averages. And I made an attempt
4 to do that in my testimony.

5 Q. Okay. And, in fact, having done that
6 adjustment, you produced a weighted average cost
7 of producing for all commercial cheddar cheese
8 plants outside of California of 20.28 cents,
9 correct?

10 A. Yes, that's my estimate of the weighted
11 average.

12 Q. Okay. And if USDA were to conclude that
13 the starting point for determining make
14 allowances should be the weighted average cost
15 of producing for commercial cheddar cheese
16 plants located outside of California, then 20.28
17 cents is the number they should use. Is that
18 correct, based upon your work?

19 A. If only one number could come out of my
20 lips, that would be the best I could give.

21 Q. Okay. Now, your survey did not include any
22 marketing cost, correct?

23 A. No, it didn't.

24 Q. And are you aware of the fact that USDA,
25 when they last sent make allowances, did make an

1 adjustment to include marketing costs?

2 A. I didn't recall that. I perhaps could have
3 gone back to look at that, but no. This was a
4 cost of processing study, not a cost of
5 marketing.

6 Q. And -- well, and to be -- and I didn't mean
7 that in any critical way whatsoever.

8 A. I wasn't being offended.

9 Q. The CDFA data, for example, also does not
10 include marketing costs. And when USDA relied
11 upon that data in part back in 2001, I think it
12 was, when we last visited these set of issues,
13 they took that data and then added marketing
14 cost on top of that.

15 A. Okay.

16 Q. And that is an adjustment that can be made
17 to your numbers as well, correct?

18 A. If I had a marketing cost number, sure, I
19 mean, you could add that.

20 Q. Okay. Now, and accordingly, if USDA
21 concludes that the make allowance should reflect
22 both the weighted average cost of producing for
23 commercial cheddar cheese plants located outside
24 of California plus a marketing cost, then the
25 way one would achieve that is to take the 20.28

1 cents that you calculated and add an appropriate
2 number for marketing costs on top; is that
3 right? It's just a mechanical measure?

4 A. Certainly, that would be the method I would
5 use, I guess, if I had the marketing costs.

6 Q. Okay. Now, you -- it is correct, based
7 upon your testimony, that energy costs have
8 increased significantly since the reporting
9 periods for the plants you surveyed; is that
10 right?

11 A. Over that time period, there have been
12 significant increases, particularly with natural
13 gas cost at the end of 2005. They've retreated
14 substantially from those highs, but we have had
15 increase in both electric and gas costs, yes.

16 Q. Okay. And you do provide some calculations
17 in your report that capture for each of the
18 surveyed products what energy cost increases
19 have been experienced; is that right?

20 A. I didn't make an estimate to move the
21 energy values forward to the 2005 calendar year
22 for most observations and back for a few that
23 were into 2006.

24 Q. Okay. And if USDA were to conclude that
25 such an energy -- let me start that question

1 again.

2 If USDA were to conclude that there ought
3 to be reflected in the make allowance the
4 increase in energy costs that you have yourself
5 observed and calculated, then the proper formula
6 for determining the make allowance, assuming
7 that's what USDA wants to do conceptually, but
8 the proper formula would be to take the 20.28
9 cents that you calculate as the weighted average
10 cost of producing for commercial cheese plants
11 outside of California, plus marketing costs, as
12 we discussed a minute ago, plus an energy
13 adjustment along the lines that you calculated;
14 is that right?

15 A. Yeah. You could keep adding things on if
16 you want.

17 Q. Okay. Well, to the extent that -- well,
18 but -- and if USDA is, in fact, trying to
19 capture the realities faced by commercial
20 cheddar cheese plants in this country, they
21 would have to take into account changes in
22 energy costs, correct?

23 A. Well, it certainly is the case that is
24 going to need to be done as time goes by. I
25 could have just as easily brought those prices