

Notice of Hearing on a Proposal to Establish a Federal Milk Marketing Order in California  
7 CFR Part 1051  
Docket No.: AO-15-0071  
AMS-DA-14-0095

### Introduction

My name is Erick Metzger, and I serve as the General Manager of National All-Jersey Inc. (NAJ), a position I have held for 10 years. NAJ's business address is 6486 E. Main St., Reynoldsburg, Ohio, 43068. I was raised on a dairy farm in Indiana, earned a Bachelor of Science degree from Purdue University in 1982 and a MBA from Franklin University in 1999. I was employed by the American Guernsey Association for 10 years, including five years as its CEO. I have been with the Jersey organizations for the past 22 years. I have testified and filed comments in conjunction with previous Federal order hearings.

NAJ is a national membership organization of over 1,000 milk producers, including nearly 100 members in California, and other people interested in supporting equitable milk pricing. Approximately 20 percent of NAJ members own dairy cattle other than Jerseys. NAJ's milk marketing policy is to advocate for milk pricing programs that will price milk based on its most valuable components in accordance with their use in consumer products. It is this policy that compels NAJ to testify regarding the proposals to establish a Federal milk marketing order (FMMO) in California.

Both the Dairy Institute and Cooperatives' proposals for a California FMMO would utilize the multiple component pricing (MCP) structure in place in six of the other 10 FMMOs. If adopted, producers will be paid for the pounds of butterfat, protein and other solids marketed, along with a Producer Price Differential (PPD). The current California Department of Food and Agriculture (CDFA) regulated milk price combines pounds of producer protein and other solids pounds into a single payment for pounds of solids nonfat (SNF). Therefore, the price signal sent by CDFA to producers is that protein and other solids have the same value. Historical FMMO prices clearly show that protein carries far more value than other solids (Table 9). From 2009 through 2014 the monthly FMMO protein price averaged \$2.94/lb., the other solids price average \$0.31/lb., and the Class IV SNF price averaged \$1.22/lb. A price of \$2.94 per pound of protein is a much stronger incentive to increase protein production than the SNF price of \$1.22 per pound.

USDA has recognized the importance of incentivizing protein production dating back to the 1973 report “Milk Pricing Policy and Procedures, Part II, Alternative Pricing Procedures”, Report of the Milk Pricing Advisory Committee, U. S. Department of Agriculture, “(3) the long term goal of maximizing total milk solids consumption consistent with the public interest. Such a policy should ~~pricing~~<sup>price</sup> milk to encourage increased production and consumption of milk protein while valuing milk fat at a level more competitive with ~~it~~<sup>its</sup> substitutes.”

In addition, the only practical approach available to producers to increase their SNF production is to increase their protein production. The Market Administrator office for FMMO 30 (Upper Midwest) publishes an annual staff paper, “Analysis of Component Levels and Somatic Cell Count in Individual Herd Milk at the Farm Level.” A summary of these staff papers from 2009 through 2014, which shows the monthly weighted average milk component levels for butterfat, protein, other solids and SNF along with the standard deviations for each component, is included as Table 1 to this testimony. Over that six-year time period the standard deviation of other solids test averaged 0.09% while the standard deviation of protein test averaged 0.16%. The difference in the standard deviations of the two components shows that producers can impact protein tests significantly more than other solids tests through their decisions regarding a herd’s feeding, genetics and culling.

Data analysis later in this testimony also utilizes Table 1 for the standard deviations of these components along with standard deviations for butterfat (0.29%) and SNF (0.18%). A dataset with distribution that is approximately normal will have about 68% of the data values within one standard deviation of the mean, and about 95% within two standard deviations. NAJ chose to use milk that is two standard deviations higher than average to represent high component milk and to demonstrate the positive impact that incentivizing production of high component milk can have on the California dairy industry. Later testimony and analysis utilizes the month-to-month protein-to-SNF ratios from these FMMO 30 annual summaries in order to convert CDFA SNF pounds and tests to pounds and tests for protein and other solids which are used in FMMO pricing.

Protein production is critically important for the California dairy industry. Higher protein milk increases yields of cheese, protein-standardized whey products, skim milk powder and whole milk powder and also results in less fortification needed for Class ~~1~~<sup>2</sup> products. Examples of each of these situations follows.

#### Cheese Production

From 2009-2014, 44.7% of California's pooled SNF production has been utilized in Class 4b products, cheese and whey (Table 2). Protein's impact on cheese yields is well documented through the Van Slyke Cheese Yield Formula.

$$\text{Cheese Yield} = (((\text{Butterfat} * .90) + (\text{True Protein} * .827 - 0.1)) * 1.09)/0.62$$

Milk pooled in California from 2009 to 2014 averaged 3.68% butterfat and 8.87% SNF (Table 9). Using the monthly protein-to-SNF ratios from Table 1 to convert SNF to protein, California pooled milk averaged 3.09% true protein. The Van Slyke Cheese Yield Formula predicts that average component milk in the CDFA pool will yield 10.14 pounds of Cheddar cheese containing 38% moisture (Table 3). However, milk that contains butterfat and true protein two standard deviations above average (4.26% F, 3.41% P) projects to yield 11.52 pounds of Cheddar cheese.

### Whey Production

Higher protein milk also results in higher protein whey. The Van Slyke formula calculates the amount of protein utilized by cheese, and by default, the amount of protein left in the whey stream. The protein recovery portion of the Van Slyke Cheese Yield Formula ( $\text{True Protein} * .827 - 0.1$ ) calculates the amount of milk protein that is utilized in the cheese. Subtracting the amount of protein utilized by the cheese from the amount of protein in producer milk determines the amount of protein in whey. The Van Slyke Cheese Yield Formula predicts that 100 pounds of average protein milk (3.09%) will have 2.55 pounds of protein utilized in Cheddar cheese, leaving the difference, 0.54 pounds, in the whey stream. 100 pounds of milk with protein two standard deviations higher than average (3.41%) will have 2.81 pounds of protein utilized in Cheddar cheese, leaving 0.60 pounds of protein in whey.

Whey products are critically important to the California dairy industry. Primary whey products are dry whey, whey protein concentrates (WPCs) and whey protein isolates (WPIs). Dry whey yields are minimally affected by the amount of protein in whey because dry whey is produced by simply drying liquid whey. Dry whey is not protein standardized. However, the amount of protein in liquid whey does have a direct impact on the yields of the protein standardized whey products (WPCs and WPIs).

CDFA data on the state's whey product production only differentiates two types of products. All WPCs and WPIs comprise one category, and Other Dry Whey Products comprise the second category. Given the limitations of the CDFA whey product data, NAJ turned to USDA's NASS Dairy Products Annual Summary which differentiates four categories of whey products: Dry Whey, WPC 25.0-49.9% Protein, WPC 50.0-89.9% Protein and WPIs. This NASS report is summarized in Table 4.

- From 2009 through 2014 the U.S. produced 5.8 billion pounds of dry whey. Assuming a protein content of 12.5% on a wet basis, approximately 731 million pounds of whey protein were used in dry whey.
- During the same time frame 1.5 billion pounds of WPC 25.0-49.9% Protein were produced. Assuming an average protein content of 33%, 508 million pounds of whey protein were used in WPC 25.0-49.9%.
- 1.2 billion pounds of WPC 50.0-89.9% Protein were produced. Assuming an average protein content of 77%, 945 million pounds of whey protein were used in WPC 50.0-89.9%.
- 406 million pounds of WPI were produced. Assuming a protein content of 89%, 362 million pounds of whey protein were used in WPI.

Nationally, the six years from 2009-2014 saw 731 million pounds of whey protein used in dry whey compared to 1.8 billion pounds of whey protein used in protein-standardized whey products. More whey protein is utilized in protein-standardized whey products than in dry whey. Basic milk chemistry implies that higher protein milk produces higher protein whey, which in turn results in increased yields of the protein-standardized whey products of WPC and WPI.

#### Milk Powder Production

The production of skim milk powder (SMP) and whole milk powder (WMP), both of which are protein-standardized, is increasing and becoming a larger portion of the milk powder market. CDFA produces an annual report, “Annual Dairy Data” which includes the state’s production of Nonfat Dry Milk and Other Dry Milk Products. Results for the years 2009 to 2014 are summarized as Table 5. Nonfat dry milk is not protein-standardized. Most of the products included in the Other Dry Milk Products category are either protein-standardized or have a protein minimum. In 2009 Other Dry Milk Products accounted for 13.0% of the combined total production of NDM and Other Dry Milk Products. By 2013 Other Dry Milk Products increased to 45.9% of the combined production of NDM and Other Dry Milk Products, before tapering off to 35.1% in 2014.

USDA’s NASS Dairy Products Annual Survey provides separate totals for NDM, Skim Milk Powder and Whole Milk Powder. The NASS reports for 2009-2014 are included as Table 6. National production of SMP and WMP as a percentage of total milk powder production is similar to California production. In 2009 NASS reported SMP and WMP production represented 15.7% of the combined total production of NDM, SMP and WMP. By 2013 SMP and WMP production had grown to 32.2% of the total, before declining to 26.8% in 2014.

Skim milk powder production can serve as a proxy for the other protein-standardized products including whole milk powder. Table 7 compares the yield of SMP from average and above average component milk. Average producer milk with 3.68% butterfat, 3.09% true protein and 5.78% other solids will yield 8.78 pounds of nonfat dry milk (5% moisture, 35.3% crude protein), which will in turn yield 9.58 pounds of skim milk powder standardized to 34% crude protein. Crude protein is the international standard for protein-standardized milk powders, and the vast majority of SMP is produced for the export market. Crude protein is 0.19 points greater than true protein, i.e. milk that contains 3.01% true protein will contain 3.20% crude protein. The manufacturing process to produce SMP is as follows:

1. Separate cream from skim
2. The separation process cannot isolate all the butterfat in the milk into the cream. Industry standards are that 0.05% butterfat will remain in the skim.
3. Cream pounds is calculated as  $(\% \text{ butterfat in milk} - \% \text{ butterfat in skim}) / \% \text{ butterfat in cream}$ .
4. Pounds butterfat in cream = pounds cream \* % butterfat in cream.
5. Cream that contains 40% butterfat, by default contains 60% skim.
6. Pounds of skim in cream = pounds cream – pounds butterfat.
7. Pounds protein in cream = pounds skim in cream \* % protein in skim.
8. Pounds crude protein in cream = pounds skim in cream \* % crude protein in skim.
9. Pounds SNF in cream = pounds skim in cream \* % SNF in skim.
10. Pounds skim available to produce NDM = pounds milk – pounds cream.
11. Pounds butterfat in skim = pounds butterfat in milk – pounds butterfat in cream.
12. Pounds protein in skim = pounds protein in milk – pounds protein in cream.
13. Pounds crude protein in skim = pounds crude protein in milk – pounds crude protein in cream.
14. Pounds SNF in skim = pounds SNF in milk – pounds SNF in cream.
15. Pounds NDM (5% moisture) made from skim = pounds SNF in skim/0.95.
16. Crude protein in NDM = Crude protein in skim/pounds NDM.
17. Pounds SMP at 34% crude protein and 5% moisture =  $(\text{Crude protein in skim}/0.34)/0.95$ .

Using the same methodology, producer milk that is two standard deviation units higher than average (4.26% F, 3.41% P, 5.96% other solids) will yield 9.18 pounds of nonfat dry milk (5% moisture, 36.7% crude protein) which will in turn yield 10.42 pounds of skim milk powder standardized to 34% crude protein. The additional yield of 0.84 pounds of SMP from each hundredweight of higher component milk supports the importance of implementing a pricing program that incentivizes protein production.

#### Solids-Not-Fat Requirements for Fluid Milk

California has set its SNF requirements for consumer fluid milk at levels higher than national standards ([https://www.cdfa.ca.gov/ahfss/milk\\_and\\_dairy\\_food\\_safety/milk\\_standards.html](https://www.cdfa.ca.gov/ahfss/milk_and_dairy_food_safety/milk_standards.html)). Ordinarily, whole milk and nonfat (skim) beverage milk do not require solids fortification to meet California fluid milk standards, since raw producer milk contains enough SNF to meet the California standard for whole milk (8.7%) and for nonfat (skim) milk (9%). But reduced fat (2%) milk and lowfat (1%) milk need to be fortified with more milk solids not fat than cows ordinarily produce.

In order to meet California standards producer milk is fortified with additional SNF by adding condensed skim (primarily) or nonfat dry milk (rarely). While Class <sup>1</sup> pricing requires processors to pay for the additional SNF pounds, processors are allowed a fortification allowance for the cost of handling the nonfat dry milk and condensed skim used in the fortification process. The amount of the fortification allowance is deducted from pooled receipts before producers are paid. Data from the CDFAs Milk Pooling Branch shows that from 2009-2014 the annual average of the fortification allowance was \$6,079,931 (Table 8).

Producer milk that is higher in protein is also higher in SNF and requires less fortification to meet the California fluid milk standards (Table 8). CDFAs annual report, "Summary of Pool Pounds, Component Pounds, Producer Handler Exempt Pounds" includes the pounds of SNF used in Class <sup>1</sup> products along with the pounds of Fluid Carrier in Class <sup>1</sup>. CDFAs report of "Summary of Fortification and Transportation Allowance" includes the pounds of SNF used for fortification. NAJ used the following calculations to determine how much less fortification would be required by using higher component producer milk.

1. Monthly pounds Class <sup>1</sup> SNF in producer milk (column J) = Total pounds Class <sup>1</sup> SNF (Table 9) – Pounds SNF from fortification.
2. % SNF in producer skim milk = Pounds producer SNF/pounds producer skim milk.
3. Pounds producer skim milk in Class <sup>1</sup> = Pounds Producer SNF + Pounds fluid carrier in Class <sup>1</sup>.
4. % SNF in producer milk that is 2 standard deviation (SD) units higher than average producer milk = % SNF in producer milk + (2 \* 0.18) (Reference Table 1)
5. SNF pounds in producer milk +2 SD = Pounds producer skim \* % SNF in producer milk +2 SD.
6. Pounds SNF fortification required with producer milk +2 SD = Pounds Class <sup>1</sup> SNF – Pounds SNF in producer milk +2 SD.
7. Fortification allowance required with producer milk +2 SD SNF = Pounds SNF fortification +2 SD SNF \* \$0.0987/lb.

8. Fortification savings with producer milk +2 SD SNF = Fortification allowance – Fortification allowance required with producer milk +2 SD.

NAJ calculated the monthly impact on the amount of fortification required if producer milk had been two standard deviations higher than average milk. Annually from 2009-2014 producers would have saved an average of \$1.7 million per year in Class I<sup>1</sup> fortification allowance from using higher component milk.

#### Summary of Importance of Protein to California Dairy Industry

Changing California's regulated milk pricing to pay separately for pounds of protein and other solids will be an improvement over the current system which pays for pounds of SNF. Producers will be compensated for protein's greater value and will be incentivized to increase their protein production. The California dairy industry will benefit from increased protein production through:

- Increased cheese yields.
- Increased yields of protein-standardized whey products, WPCs and WPIs. More whey protein is utilized in WPCs and WPIs than is utilized in dry whey.
- Increased yields of protein-standardized milk powders, primarily SMP and WMP. Production of SMP and WMP is increasing as a percentage of the milk powder market, and this trend is expected to continue.
- Reduced need and expense of fortifying Class I<sup>1</sup> products with SNF from condensed skim and NDM.

#### Analysis of Applying the Producer Price Differential to Components

The six FMMOs utilizing multiple component pricing pay producers for the Class III value of their milk (total pounds of butterfat, protein and other solids sold) along with a PPD to account for the difference in the value of pooled Class I, II and IV milk from the Class III value. The PPD is calculated on a per hundredweight basis of all pooled milk, and it can be positive or negative, although PPDs are positive the vast majority of the time.

The Cooperatives' proposal for a California FMMO calls for the PPD value to be assigned to the component values of butterfat, protein and other solids that are paid to producers. NAJ estimated what monthly PPDs would have been in a California FMMO from 2009 through 2014 using both the conventional per hundredweight basis employed by the existing MCP FMMOs and by adjusting producer

component values as outlined in the Cooperatives' proposal. The analysis is included as Table 9 and employed the following data and methodology:

1. CDFA Summary of Pooled Pounds and Component Pounds which includes pooled pounds of butterfat, SNF and Class <sup>1</sup> Fluid Carrier for California Class 1, 2, 3, 4a and 4b by month Columns C through R).
2. Pounds of Class 4b protein = Pounds 4b SNF \* Monthly protein-to-SNF ratio from Table 1 (FMMO 30 Analysis of Component Levels).
3. Pounds of 4b other solids = Pounds 4b SNF – Pounds 4b protein.
4. Pounds protein pooled = Pounds SNF pooled \* Monthly protein-to-SNF ratio from Table 1.
5. Pounds other solids pooled = Pounds SNF pooled – pounds protein pooled.
6. Pool butterfat % = total pounds pooled butterfat / total pooled pounds producer milk.
7. Pool SNF % = total pooled pounds SNF / total pooled pounds producer milk.
8. Pool protein % = total pooled pounds protein / total pooled pounds producer milk.
9. Pool other solids % = total pooled pounds other solids / total pooled pounds producer milk.
10. USDA Dairy Programs announced prices for Class I skim and Class I, II, III and IV components (columns AA through AH).
11. Class I receipts = (Pounds Class 1 fluid carrier + pounds Class 1 SNF) \* Class I skim price per pounds + (Pounds Class <sup>1</sup> butterfat \* Class I butterfat price per pound).
12. Class I location differential = Pounds Class I milk \* \$1.97 weighted average Class I differential.
13. Class I weighted average differential = (% Class <sup>1</sup> sales Northern California \* \$1.80/cwt. + % Class <sup>1</sup> sales Southern California \* \$2.10/cwt.) CDFA's Milk Pooling Branch reports Class <sup>1</sup> sales by region and those data are included as Table 11. USDA's Class I differentials by county shows Northern California to be in the \$1.80/cwt. zone and Southern California to be in the \$2.10/cwt zone. (Table 11)
14. Class II receipts = ((Pounds Class 2 SNF + pounds Class 3 SNF) \* Class II SNF price per pound) + ((Pounds Class 2 butterfat + pounds Class 3 butterfat) \* Class II price per pound butterfat).
15. Class III receipts = (Pounds <sup>class</sup> 4b butterfat \* Class III butterfat price per pound) + (Pounds Class 4b protein \* Class III protein price per pound) + (pounds <sup>class</sup> 4b other solids \* Class III other solids price per pound).
16. Class IV receipts = (Pounds Class 4a SNF \* Class IV SNF price per pound) + (pounds <sup>class</sup> 4a butterfat \* Class IV price per pound butterfat).
17. Total pooled receipts = Sum of Class I, Class I location differential, Class II, Class III and Class IV receipts.



18. The transportation credits and allowances used are the historical monthly totals provided by CDFA in Table 10. NAJ did not attempt to recreate and estimate the transportation credits as proposed in the Cooperative proposal.
19. The fortification allowance used is the historical fortification allowance provided by CDFA.
20. Quota premium, net of Regional Quota Adjuster, was provided by CDFA.
21. The Market Administrator Fee is fixed at \$750,000 per month. This total reflects both the approximate monthly cost of CDFA's Milk Pooling Branch and the typical MA office assessment rate of \$0.02/cwt for member milk and a variable, higher rate for independent milk.
22. Total pool deductions = Sum of Transportation, Fortification Allowance, Quota and MA fee.
23. Net to producers = Total pooled receipts – Total pool deductions.
24. Class III value = (Pooled pounds protein \* protein price per pound) + (pooled pounds butterfat \* Class III butterfat price per pound) + (pooled pounds other solids \* other solids price per pound)
25. Pool PPD value = Net to producers – Class III value
26. PPD per hundredweight = Pool PPD / total hundredweights of pooled milk
27. The percentage of the PPD to be assigned to each of the three components (butterfat, protein and other solids) for 2009 through 2013 was obtained from analysis done by Dr. John Newton and published by Dairy Markets and Policy Information Letter Series, "Interpreting Proposed Language for the California Federal Milk Marketing Order". NAJ calculated the percentages for 2014.
28. PPD value assigned to butterfat = Total PPD value \* % PPD butterfat.
29. PPD value assigned to protein = Total PPD value \* % PPD protein.
30. PPD value assigned to other solids = Total PPD value \* % PPD other solids.
31. PPD per pound butterfat = PPD butterfat value / pounds pooled butterfat.
32. PPD per pound of protein = PPD protein value / pounds pooled protein.
33. PPD per pound of other solids = PPD other solids value / pounds pooled other solids.
34. Producer butterfat price = Class III butterfat price + PPD per pound of butterfat.
35. Producer protein price = Protein price + PPD per pound of protein.
36. Producer other solids price = other solids price + PPD per pound of other solids.
37. % butterfat +2 SD = pool butterfat % + (2 \* 0.29)
38. % protein +2 SD = pool protein % + (2 \* 0.16)
39. % other solids +2 SD = pool other solids % ~~+~~ (2 \* 0.09)
40. PPD per hundredweight +2 SD = (( % butterfat +2 SD \* PPD per pound butterfat) + (% protein +2 SD \* PPD per pound protein) + (% other solids +2 SD \* PPD per pound other solids)) / 100

NAJ's analysis found the PPD to be negative 46 out of the 72 months, or nearly two-thirds of the months included. The average monthly PPD is -\$0.27 per hundredweight. When the PPD is distributed across components as requested in the Cooperatives' proposal, the average monthly PPD is -\$0.03 per pound of butterfat, -\$0.05 per pound of protein and negative less than \$0.01 per pound of other solids. The analysis determined that the PPD would average -\$0.31 per hundredweight for higher component milk (+2 SD).

As outlined and documented earlier in this testimony, changing California's regulated milk pricing to be based on protein and other solids instead SNF will send producers the proper economic signal to increase their protein production. However, the proposal to distribute the pool's PPD value to component values will partially negate the incentive to increase component production. Given that PPDs will be negative nearly two months out of every three, component values to producers will be discounted two-thirds of the time. Furthermore, the Cooperatives' proposal that the PPD be apportioned among the components relative to their value to the total Class III value results in the largest negative PPD value being assessed to the most valuable component. Economic convention and logic would be to incentivize the production of milk's most valuable component, not to apply the largest discount to its price. In addition, higher component milk, represented in this analysis by milk that is two standard deviations higher than average milk, on a per hundredweight basis will be discounted more than average component milk even though the higher component milk provides greater benefit to the California dairy industry.

NAJ urges the Secretary to reject the proposal to assess the PPD value to milk components because PPDs will be negative most months. Production of milk components should be incentivized in California, and this PPD proposal will instead dis-incentivize component production. Instead, if a FMMO is recommended for California, the PPD should be calculated and distributed to producers on the basis of hundredweights of milk pooled, as is done in the other FMMOs utilizing multiple component pricing.

#### Cooperative Proposal for Pool Plant Provisions

NAJ opposes the Cooperatives' proposal to classify all plants in the marketing area receiving Grade A milk as pool plants.

First, while the Cooperatives' proposal provides exemptions for certain Class I plants, similar exemptions are not proposed for manufacturing plants. Specific pooling exemptions are proposed for Producer-Handlers with less than 3 million pounds of Class I distribution per month, and other Class I plants with route distribution less than 150,000 pounds per month. These same Class I exemptions exist in the other FMMOs. However, the Cooperatives' proposal does not provide exemptions for any manufacturing plants. Such exemptions are not needed in the other FMMOs because pooling manufacturing milk is

optional, and any manufacturing plant, regardless of capacity, can simply opt not to pool their milk. NAJ believes that at a minimum a California FMMO should provide exemptions from pooling to manufacturing plants that meet the same milk source and monthly volume criteria as exempted Class I plants.

NAJ proposes that producer-owned manufacturing plants processing less than 3 million pounds of milk per month of only their own milk, and any manufacturing plant processing less than 150,000 pounds of milk per month be exempted from pooling. Due to FMMO price formulas that set the Class I price as the higher of the advanced Class III or IV price, the regulated price for Class I milk is higher than the regulated price for manufacturing milk most months. NAJ believes that if some of the marketing area's plants with the highest value milk (Class I) warrant exemption from pooling, the same pooling exemption should be provided to manufacturing plants meeting the same criteria as the exempted Class I plants.

NAJ's second objection to defining all plants in the marketing area as pool plants is that this provision does not exist and has not been proposed in any other FMMO. In the other FMMOs manufacturing milk is incentivized to be pooled in order to receive the Order's PPDs, which are positive the vast majority of months. About ten years ago depooling manufacturing milk became problematic in some FMMOs because manufacturing plants had the option to depool all their milk for any month that an Order's PPD was negative, and then immediately re-associate all their milk with the pool the following month if the PPD became positive. This issue was addressed by amending FMMO pooling provisions. The approved changes did not reclassify all plants in the marketing area as pool plants, and in fact, that option was not part of any hearing proposal. Instead FMMO provisions were changed to restrict how much milk a manufacturing plant could pool in a given month to be based on a percentage of the milk the plant pooled the previous month. The revised pooling provisions incentivized manufacturing plants to pool a significant amount of their milk the occasional months that PPDs were negative. While manufacturing plants and the producers supplying those plants stand to make money by depooling milk in months with negative PPDs, the strict re-pooling provisions mean the plants and producers will forgo PPD revenue the following months when PPDs are likely to be positive. NAJ supports implementing pooling provisions and restrictions similar to those in other FMMOs for a California FMMO.

The ability to depool milk also serves a vital role in balancing the milk supply. To quote a long-time colleague and friend of the dairy industry, Ben Yale, "In order for there to be enough milk all of the time, there needs to be too much milk some of the time."

Some manufacturing plants exist primarily to balance the milk supply during the times of too much milk. These plants run at full capacity only part of the year when milk supply outpaces conventional processing capacity. The rest of the year these balancing plants operate on reduced schedules or may shut down entirely. Due to their irregular processing schedules, their costs, and therefore their make allowances, are greater than those of manufacturing plants that can run at full capacity nearly all the time. These balancing plants can offset their higher costs by purchasing milk for less than Class value when surplus milk is abundant. The Cooperatives' proposal requiring all plants to be pool plants eliminates the option for below Class sales, and will greatly hinder, if not eliminate, the ability of balancing plants to be competitive. The elimination of these balancing plants will lead to increased disorderly marketing by requiring milk to be hauled farther to find available processing capacity or even an increase of milk being dumped.

#### Dairy Institute Proposal for Class III and IV Prices

Different price formulas between Orders can and do lead to disorderly marketing. The regulated prices in the three FMMOs in the southeastern United States, Orders 5, 6 and 7, are based on fat and skim values while the surrounding FMMOs are based on multiple component pricing. NAJ observes milk movement into and out of Orders 5, 6 and 7 based on its component levels and component prices instead of serving market needs or to promote marketing efficiency. In the overlapping milksheds serving the three southeast markets, which use fat-skim pricing, and the neighboring Southwest, Central, Mideast, and Northeast markets, which use multiple component pricing, <sup>the</sup> incentives created by regulation rather than efficiency can be significant. High protein milk produced in the southeast markets, or in the nearby milkshed, is encouraged by multiple component pricing to be marketed to maximize component income. This draws available milk away from fluid use in the southeast markets, aggravating the deficit production that characterizes those markets. Conversely, low solids milk in the common milkshed is encouraged by fat-skim pricing to be marketed under the southeast milk order pools, because greater revenue is available under a pricing plan that does not account for less value in low protein producer milk. These marketing patterns, created by regulatory incentives, come at the expense of marketing efficiency.

Establishing unique price formulas for a California Order, which may in turn set precedent for other FMMOs, holds the potential for similar inefficient milk movements simply because of differences in regulated price formulas rather than market need, market value, or marketing efficiency. Therefore, NAJ finds the Dairy Institute proposal which would establish price formulas for Class III and IV milk that would be specific to a California order to be problematic. Producers and processors in every FMMO can claim production, marketing and manufacturing conditions in their marketing area that are unique to their

Order. Establishing separate price formulas for a California Order would set a precedent that NAJ expects would lead to other Orders requesting unique price formulas for their Orders, most probably starting with the Pacific Northwest and Arizona Orders given their proximity to California and their competition for similar markets.

The issues of price discovery and make allowances may well need to be updated, and perhaps even regionalized. An evaluation of a national surface map for milk used for Class III and IV products may be in order. Any such analysis should include exported milk solids given that exports account for 15% of the milk solids produced nationally, including 30% of the milk solids produced in California (Table 12). NAJ believes these issues are best addressed through a hearing covering all FMMOs and not on an individual Order basis. Should the Secretary recommend a FMMO for California which includes Class III and IV price formulas specific to the Order, NAJ suggests a delay in implementation of a Final Order until USDA can convene a national hearing covering the other Orders to afford them the same consideration granted to California.

#### Conclusion

Implementation of FMMO pricing in California will provide a stronger price signal to produce protein than the current CDFA pricing. However, as outlined in this testimony, NAJ finds to be problematic parts of the Cooperatives' proposal dealing with PPD calculations and pooling and the Dairy Institute proposal requesting unique price formulas for Class III and IV milk in a California Order.