BEFORE THE UNITED STATES DEPARTMENT
OF AGRICULTURE
AGRICULTURE MARKETING SERVICE

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

Clovis, California, October 2015

Testimony of Dr. William Schiek

Part 1

INTRODUCTION

My name is William Schiek. For the past 18 years I have been Economist for Dairy Institute of California, a trade association representing fluid milk processors and dairy product manufacturers with plants in California. Dairy Institute's offices are located at 1127 11th Street, Suite 718 in Sacramento, California. Our organization has been representing California milk processors since 1939.

Today, Dairy Institute represents 25 dairy companies which process approximately 65% of the state's fluid milk and manufacture about 90% of the state's cheese and 75% of its cultured dairy products and ice cream. Dairy Institute's members operate in both state marketing areas in California. Dairy Institute provides member companies with market and regulatory information services and advises them on regulatory and legislative issues impacting their business operations. We also serve as our members' primary advocate on dairy legislative and regulatory matters.

I. CALIFORNIA HAS MANAGED ITS DAIRY PROGRAMS TO KEEP MARKETING CONDITIONS ORDERLY

The Dairy Institute concludes that there are no significant disorderly marketing conditions that would warrant the promulgation of a California Federal Milk Marketing Order ("FMMO"). In the letter accompanying the submission of their proposal (Proposal 1), the three cooperatives, Dairy Farmers of America (DFA), Land O' Lakes, Inc. (LOL), and California Dairies, Inc. (CDI) argue that the mere existence of differences between regulated minimum

prices under California's State Order and those in Federal Milk Marketing Orders (FMMOs) is *prima facie* evidence of disorderly marketing. In their letter justifying the need for a FMMO in California, they offered no description of existing marketing conditions in the state that were disorderly, only the unsubstantiated presumption that different regulated price levels mean that marketing conditions must be disorderly.

What is perhaps unusual is that this proceeding does not involve promulgating a marketing order in an area that is presently devoid of milk pricing regulations, but in an area that has a functioning and effective state milk marketing order. Furthermore, it is a state order with both classified pricing and marketwide pooling, two key features of federal orders that are acknowledged to be the foundation of the policy toolkit used by USDA to bring about orderly marketing in FMMOs. Beyond that, California's state order is one with a long history of promoting orderly marketing and of adapting regulation to changing market conditions to ensure that orderly marketing of milk is maintained. Indeed California statutes require orderly marketing of milk as a fundamental goal and purpose of state milk price regulation.

Division 21, Part 3, Chapter 2, Section 61802(e) of the California Food and Agricultural Code states:

"It is the policy of this state to promote, foster, and encourage the intelligent production and orderly marketing of commodities necessary to its citizens, including market milk, and to eliminate economic waste, destructive trade practices, and improper accounting for market milk purchased from producers."

In Section 61802(h) the importance of orderly marketing is emphasized again:

"...It is further recognized by the Legislature that, in order to accomplish the purposes of this chapter and to promote the public health and welfare, it is essential to establish minimum producer prices at fair and reasonable levels so as to generate reasonable producer incomes that will promote the intelligent production and orderly marketing of market milk in the various classes..."

History of State Efforts to Ensure Orderly Milk Marketing in California

California's dairy statutes and regulations that were designed to address orderly marketing ironically had their genesis in a failure of Federal regulations to address the marketing problems in the state. Under the 1933 Agricultural Adjustment Act, marketing agreements were set up in several urban fluid milk markets ~~during~~ in the state.[i] When the US Supreme court held that these original marketing agreements were invalid, California was left without any regulatory programs to address the state dairy industry's problems at the time. Before the U.S. Government resolved the problems identified by the Court with the 1935 Act and the 1937 Agricultural Marketing Agreements Act (AMAA), California had begun working on its own solution authorized under state governmental authority. "Producer price regulation was contained in the Young Act of 1935. The legislation designated a third party, the Director of Agriculture, to establish minimum prices to be paid for fluid milk and cream to producers by distributers.... A classified pricing system with Class 1 milk for beverage use was the foundation of the minimum price."[ii]

Regulatory programs in other states were established during the mid-1930s, but when Federal orders became an option after the passage of the AMAA, many of those states abandoned their milk price regulatory programs[iii]. In California, the Young Act did not include provisions for marketwide pooling of milk. Individual handler pools were felt sufficient to address the industry's needs and to encourage orderly marketing because the utilization of the Grade A milk supply in fluid milk products was in excess of 80%.

Numerous adjustments have been made by California state milk marketing orders over the years to keep up with changes in the marketplace and maintain orderly marketing. Some of these have been instigated by state legislation (with conforming regulatory changes following), while others have been purely regulatory in nature. These included several features and adjustments that are described in the following pages.

Wholesale and retail pricing. To preserve revenue opportunities for dairy farmers and promote industry stability, the legislature passed the Desmond Act in 1937. After the legislation passed, the Director of Agriculture began to establish minimum wholesale and retail (collectively referred to as resale) prices. The establishment of minimum resale prices discouraged retailers from pressuring processors to provide packaged milk at lower prices, driving down margins in the industry in a manner that would reduce the number of buyers of Class 1 milk in the marketplace and limiting competition for dairy farmers' milk. The Agriculture Department Director set minimum resale prices so as to cover all reasonable costs, including a reasonable return on investment for reasonably efficient distributors of the various types, and to protect consumers by not requiring them to pay milk prices that were higher than those ~~need~~ needed for the maintenance of adequate and efficient distribution facilities[iv]. The Desmond Act was repealed in 1978 in the face of court actions and an evolving industry where minimum resale prices were no longer deemed necessary.

Unlawful Practices and Prohibition of Sales below Cost. In 1947, the California legislature passed the Dairy Products Unfair Practices Act. After passage of the Act, the Director of Agriculture regulated certain practices such as sales below cost, offering secret rebates, making

loans to customers, engaging in false advertising, and offering special pricing to select customers. Also the new act addressed the issue of entities that did not market fluid milk, but instead, marketed only manufactured dairy products. These firms had an advantage over full-line distributers who were subject to the Desmond Act. Preventing large or well-funded dairy product marketers from using below cost sales or prohibited marketing practices to drive competitors out of business was an area of concern. The prevailing view at the time was that such practices could reduce the number of buyers of dairy farmers' milk in the state, reducing competition and thereby undermining the bargaining power of producers with respect to their interactions with milk buyers.

The Unfair Practices Act was amended in 2000 to allow processors to engage in common marketing practices, but the prohibition of sales below cost was retained. Revised regulations under the authority of the Dairy Marketing Branch that specified how "cost" is determined when evaluating whether couponing or other various promotion programs are in compliance with the Act were established in 2005.

Component Pricing and Formula Pricing. With the introduction of California's lowfat milk standard in 1962, component pricing was established for Class 1 milk. The lowfat milk standard required that milk sold as lowfat (2%) milk be required to have 10% nonfat milk solids, which required fortification. The basis for establishing how Class 1 milk prices were paid by handlers was changed to a component basis that required payment for milkfat (butterfat), nonfat milk solids (solids not fat or SNF) and fluid carrier (the portion of milk that is neither milkfat nor nonfat milk solids). This change was put in place to recognize that the degree of fortification required to meet the new lowfat milk standard would vary by processor depending on the average test of its incoming milk.

Fluid milk processors receiving milk with a high percentage of SNF would be required to fortify less than would processors receiving milk with a low SNF percentage. This difference could lead in turn to unequal raw product costs for competing handlers in the marketing area. By adopting a three-component Class 1 price system, the California state marketing order effectively modified its pricing to equalize raw product cost. This equalization was made possible because the SNF component was being explicitly priced and now had a regulated cost both to processors who obtained SNF as part of their producer milk and to those that purchased it in the form of nonfat dry milk (NFDM) or condensed skim.

In 1965, classified pricing based on finished product prices for butter and nonfat dry milk began to be used to price milk used in manufactured products. Prior to this time, prices for market (Grade A) milk used to make manufactured dairy products had been established based on the price of manufacturing grade (Grade B) milk. Because of the diminishing quantity of manufacturing grade milk being produced in California, the state adapted to the changing marketplace by introducing a formula price based on end product prices, a concept that was eventually fully adopted by the FMMOs in 2000.

Formula pricing of Class 1 milk did not begin until 1978. The industry recognized that: 1) inflation was leading to the need to adjust Class 1 prices on a frequent basis, 2) the calling of frequent hearings was inefficient, and 3) resulting price changes were often "behind the curve" because by the time changes resulting from the hearing were implemented, market conditions had changed again. An automatic formula that changed the Class 1 price on a bimonthly basis was adopted in August 1978 to replace the method of establishing fixed price values through hearings. The new Class 1 formula was a weighted average of three factors: an index of California per hundredweight milk production costs (given 43% weight), a dairy commodity

reference price (weighted 42%) and the real average weekly earnings of manufacturing workers (15%)[v]. This three-factor formula value was then compared to a previously established per hundredweight Class 1 base value and the change was apportioned to each of the components: fat, SNF, and fluid carrier on proportional basis (40%, 40%. and 20%, respectively).

In 1993, the production cost index and manufacturing wage were dropped from the formula and only the commodity reference price was used to adjust Class 1 component values. In 1999, the method of apportioning formula changes relative to the Class 1 "base value" among the Class 1 components was abandoned. The Class 1 price going forward was established directly using a commodity reference price that was based on the CME prices for cheddar cheese 40-pound blocks and Grade AA butter and a milkfat component price formula based on the Chicago Mercantile Exchange (CME) Grade AA butter price. After Federal Order Reform in 2000, the California commodity reference price was changed to reflect the higher of a butter-powder value or a cheese value so that the formula would track more closely with Class I prices in the FMMOs.

Gonsalves Milk Pooling Act.[vi] The Young Act of 1935 provided for regulated minimum prices to be paid by fluid milk handlers to producers for the milk they purchased for fluid use. While the bulk of fluid grade milk used in the state was for fluid purposes, there was always some milk that was being used for manufacturing purposes. An amendment to the Young Act in 1937 provided for regulated minimum prices to be applied to fluid Grade milk used for manufacturing purposes.

After World War II, the growth of the state's population, coupled with growth in the supply of fluid grade milk, led to a situation where milk utilization could differ substantially

effective at the time

across handlers. Given the system of fluid milk contracts and individual handler pools, the blended prices received by dairy farmers supplying different handlers could likewise vary substantially. Because of this, contracts to supply handlers' with high fluid milk (Class 1) utilization were especially prized. This put Class 1 handlers in a strong bargaining position with producers and led to practices by some handlers, particularly in Southern California, that eroded producer revenues. In addition, more Class 1 processors were acquiring milk cows and dairy farming operations, which further reduced the Class 1 milk revenues available to be shared among producers. Weakness of producers' cooperatives in this period prevented them from bargaining effectively on behalf of their dairy farmers with Class 1 processors.

Several compromises were made in order to reach the political accord necessary to pass pooling legislation. Dairy farmers in Southern California were unwilling to accept marketwide pooling as typically constructed in FMMOs. Southern California farmers had a higher share of contracts with high Class 1 usage handlers. For them, marketwide pooling seemed to be too large a transfer of revenue from the South to the North. Quota was born out of this concern as a way for Southern California dairy farmers to preserve some of their historical Class 1 earnings. Without their support, the quota legislation could not have passed.

Under the quota plan adopted, each producer was allocated production base equal to his or her milk marketings on an average daily basis during July through December of 1966 or the calendar year 1967, and quota allocations to dairy farmers were calculated as 110% of their historical sales to Class 1 uses during the period. Any milk marketed in excess of a producer's quota and base allocations was termed overbase milk. Revenues from Class 1 (fluid milk) and mandatory Class 2 (cream and cultured products) uses were allocated to producers based on their quota holdings. So quota revenues and the amount of quota producers received were explicitly linked to the Class 1

market. This system was approved by producers in a referendum held on September 10, 1968, and the plan became effective in July 1969. Base and overbase received lower class allocations. As the state's Class 1 sales grew, it was anticipated that new quota allocations would be given to producers with lower quota holdings up to the point where quota was equal to 95% of each producer's base marketings or production base. At such point, the producers were said to be equalized.

At the time pooling was instituted in California, the state's population was growing rapidly, as was fluid milk demand. The producer leadership who were instrumental in designing this system of pooling believed that eventually all producers would be equalized and the quota system would become unnecessary, but at the beginning the prevailing view among industry leaders was that without the quota system, demand growth for fluid milk would outstrip production growth. Consequently, quota ~~w~~ was viewed at the time as a necessary means of ensuring that there would be adequate supplies of fluid grade milk and fluid products for consumers. In such an environment, it was expected that new producers could be easily accommodated with additional quota. As it turned out, production outstripped fluid milk demand in the state and fluid milk utilization in the market declined sharply over time, exactly the opposite of what had been expected. So even though the foundational basis and economic rationale of the quota system evaporated, the institution of quota endured.

As the pooling program was being discussed in the late 1960s, there was also concern about the growing number and volume of fluid milk bottling operations that also had dairy farming operations. These entities produced a portion, or in some cases the entire amount, of the milk they processed. The prospect of marketwide pooling concerned the larger operations among these entities because some of the advantages they had under the prevailing system of

individual handler pools (such as the income benefit they gained from their farms' direct Class 1 sales to their plants) would be relinquished.

To head off producer handler opposition to pooling, political concessions were made regarding their regulatory treatment. Smaller producer handlers were exempted entirely from pooling and received no quota allocation, while larger entities were given the option of forgoing the quota draw from the pool that they were entitled to as dairy farmers, and instead were allowed to exempt (deduct) these pounds from their processing operation's Class 1 obligation to the pool. So while such exemption was contrary to the central notion of pooling, that is, the sharing of Class 1 revenues among all dairy farmers in the market, it was ~~made part of the state~~ incorporated in the proposed pooling law for political expediency.

The possibility of marketwide pooling also created concerns for Class 1 processors. In the discussions leading up to the drafting of pooling legislation, processors voiced the concern that they would not be able to continue drawing milk supplies as they had done under the system of individual handler pools. The handler pools created a direct incentive for producers to supply the Class 1 market because of the higher price that handlers with high Class 1 usage were able to offer to dairy farmers. Class 1 processors believed that pooling would essentially make producers indifferent as to where they shipped their milk, and as a result they would have to pay additional premiums above the already higher Class 1 price in order to attract a sufficient milk supply.

In order to secure milk bottler support for pooling legislation, or at least to eliminate their opposition, the producer leadership promised that enough milk would be available to satisfy the Class 1 market[vii]. To help ensure that this promise to serve the Class 1 market would be kept, the original California milk pooling plan established location differentials to provide dairy farmers

with economic signals that would encourage them to ship milk to designated deficit counties. These location differentials were added to or deducted from quota payments to dairy farmers based on the plant of first receipt. Later, as overbase milk production began to increase and to represent a large share of the milk produced in the state, location differentials that applied solely to quota milk became less effective at making sure milk was available to Class 1 plants.

Milk Movement Incentives. In 1979, milk movement requirements, also known as "call provisions" were established as part of the milk stabilization and marketing plans (stab. plans). Call provisions require that manufacturing plants that participate in the pool make a specified percentage of the quota milk they receive available to plants processing Class 1 products if requested. Thus, if producers do not have a direct economic incentive large enough to encourage them to ship milk to Class 1 plants, the call provisions allow for the plants to request the milk and it must be made available. Unfortunately, these are not perfect mechanisms for moving milk to Class 1 markets. Manufacturing plants are sometimes loathe to give up milk when requested because of the inefficiencies they incur in their plants when throughput milk volumes are less than planned. The call provisions do not specify a maximum charge on milk surrendered for Class 1 use, so the possibility of high "give up" charges exists. Still, they do provide for supplies to be made available for Class 1 uses if requested.

A system of transportation credits was established in 1981. The need for transportation credits arose from the consolidation of marketing areas in the state and the insufficiency of area differentials (differences in Class 1 prices in the various marketing areas) to cover the cost of milk movements. The principle that has been used historically for setting transportation credit rates has been the cost of moving milk, less any area differential between the plants. Usually there is some shortfall in the credit rate, and the shortfalls typically increase with distance to

encourage closer milk to move first. The credits provided a way to encourage plant to plant movements of milk, but did nothing to encourage dairy farmers to move milk to fluid bottling plants.

Transportation allowances were instituted in 1983 as a replacement for location differentials as a means of encouraging milk movement to Class 1 plants in deficit markets. The allowances apply to all California Grade A milk moving from farms to plants located in qualifying areas that process more than 50 percent of the milk they receive into Class 1, 2 or 3 uses. Also, farm milk shipments to cooperative plants located in designated deficit areas are eligible for transportation allowances if the plant supplies at least 40 percent of the milk it receives for Class 1 uses. These allowances provide some compensation to producers for the cost of hauling from the dairy farm to the deficit-area plant.

The principle for establishing transportation allowance rates begins with the difference between the cost of the local haul in surplus milk production zones and the cost of the haul from the production location to the deficit area. For milk located nearer to the deficit area, the allowance rates were set equal or nearly equal to the haul cost difference just described. For more ~~distance~~ distant milk, the compensation for the haul cost difference is shorted with the goal of encouraging more efficient milk movements.

Both transportation allowances and credits have been adjusted many times since they were instituted in the early 1980s. The ability to keep these milk movement incentives updated and reflective of current costs and marketing conditions has been helped greatly by ~~biannual~~ semi-annual hauling cost surveys conducted by CDFA. Among other things, they provide information on the hauling costs that are key to setting the transportation allowance and credit rates. They also

contain information about how much milk is moving from each of the various supply areas to each of the deficit areas, so changes in supply patterns can be identified and changes made to the structure of allowances and credits as needed.

Historically, the goal of the allowances and credits has been to provide only such transportation assistance as is needed to get the milk to move. Originally, the systems' goal and intent was not to equalize hauling rates among producers, but to provide only the assistance necessary to ensure that Class 1 plants had a milk supply available to them at something close to order prices. Dairy farmers whose best or only market alternative (lowest cost to market) is a fluid milk plant usually did not receive any transportation allowance, because they would ship their milk to a Class 1 plant without the incentive. In recent years, there have been some exceptions made to this principle to address market changes in specific regions. Likewise, milk shipments to fluid milk plants located in the San Joaquin valley were not eligible for allowances or credits because they are surrounded by more than sufficient milk supplies for their needs and are not disadvantaged relative to local manufacturing plants when it comes to attracting milk to their plants.

Producer's Security Trust Fund. There was a major bankruptcy of the state's largest milk buyer (Knudsen-Foremost) in the mid-1980s. As a result of the bankruptcy, many producers were left unpaid for the milk they had shipped. In 1987, the California Legislature passed a law establishing the Milk Producers Security Trust Fund. This fund was designed to have enough money to cover a default of the state's largest proprietary milk purchaser. It was created through assessments on Class 1, 2, and 3 processors. Once the Fund balance reaches its target level of 110% of the value of monthly milk purchases of the state's largest processor, assessments stop. Beneficial interest prohibitions exclude producers from collecting from the Fund.

Because the state's largest proprietary milk purchasers were now cheese companies, rather than fluid milk bottling companies, it seemed inequitable to continue requiring handlers of Class 1, 2, and 3 products to be the only ones contributing to the Fund balance. By the mid-2000s, the monthly purchases of several of the state's largest proprietary milk processing companies exceeded the Fund's balance by millions of dollars. Two changes were then made to the funding. Rather than continuing to assess processors in order to bring the fund up to its target level, following legislation passed in 2006, the largest companies were able to post financial instruments to cover the gap between the Trust Fund balance and 110% of the value of their average monthly milk purchases[viii]. If, however, the fund is depleted and assessments are needed to rebuild it to its target level ~~at the time the new funding mechanisms were implemented,~~ assessments would be required on proprietary handlers of classes 1, 2, 3, 4a, and 4b. This was another example of an instance where California had successfully managed to update its dairy regulatory system to adapt to changes in the structure of the marketplace.

Class 4a and Class 4b pricing. In 1980, the Class 1 utilization in California fell below 50% for the first time[ix]. The 1980s were a period of tremendous growth in dairy product manufacturing in California, particularly for butter/powder and cheese. Prior to 1982, storable manufactured products such as butter, milk powders, and cheese were all grouped together as Class 4. As I have already noted, beginning in 1965, Class 4 prices were calculated based on market prices for butter and nonfat dry milk. In 1982, the Class 4 price was split into Class 4a (butter and milk powders) and Class 4b (cheeses other than cottage cheese), but both of these class prices continued to be calculated from butter and nonfat dry milk prices. Implied milk use values for Class 4a and Class 4b tracked closely in the early 1980s because dairy commodity prices were often at CCC intervention levels. So at the time, cheesemakers in California were able to tolerate

their milk cost being based on the price of products they did not make. The cheese industry continued to grow, and in 1986 cheese production exceeded butter and nonfat dry milk production on an annual basis for the first time.

However, by the late 1980s, the implied value of milk based on NFDM and butter prices began to rise significantly, while the cheese-use milk value did not keep pace. The result was that cheesemakers in the state, who were buying their milk priced off a butter-powder market, were not able to profitably market their product. The butter/NFDM based milk price was simply too high. So in 1989, a new Class 4b formula was established based on prices for cheese and Grade B butter (to represent the value of whey cream). No value for the skim portion of the whey was incorporated into the Class 4b formula at its inception. However, by adding a new class formula that addressed the problem cheesemakers were experiencing, CDFA was making it possible that market outlets for California dairy farmers' growing milk supplies would be available.

Quota reform. By the early 1990s, the quota program was experiencing pressure as a result of the rapid growth in milk production and the growing number of dairy farmers whose income was derived largely, or even entirely, from the overbase price. These were producers who owned little (as a share of their total production) or no quota. Before 1994, quota revenues were derived from Class 1, 2, and 3 prices. Overbase prices were derived from Class 4a and 4b prices. As a result, the difference between quota and overbase prices could vary widely by month. As the amount of overbase production grew, producers with little or no quota were dissatisfied with the fact that they had no access to the higher Class 1 revenues in the market. Quota holders on the other hand, were happy with the status quo. After considerable industry discussion, a quota reform bill was passed in 1993 and became effective in 1994. The new bill established the quota

price at $0.195 per pound of quota SNF above the overbase SNF price, an amount equal to $1.70 per hundredweight for milk at standardized test (3.5% milkfat, 8.7% SNF). In establishing the "quota premium" level at $1.70 per hundredweight, the historic value of quota in comparison to overbase was explicitly considered. Consequently, the notion that quota derives its value from the Class 1 and other higher valued-uses remains an important concept. The fact that the "call provisions" mentioned earlier require dairy product manufacturers to make quota milk available for Class 1 usage is another such linkage. As was noted earlier, an additional change made at the time of quota reform was to abandon the historic three factor formula that used a weighted average of a commodity reference price, cost of production index, and manufacturing wage index and replace it with a formula that would make changes to the Class 1 base values using only the dairy commodity reference price factor.

Class ~~I~~ 1 Price Adjustments. Class 1 price adjustments have been a frequent subject of California milk pricing hearings. Before a Class 1 formula was adopted, Class 1 prices were set at a particular level by the Secretary through a hearing decision, and the only way the price could be changed was through another hearing. After adoption of the pricing formula in the late 1970s, Class 1 prices adjusted automatically, but the three-factor formula resulted in price levels that were noticeably lower than Class I prices in FMMOs. Initially, the combination of low California milk production costs, relatively high Class 1 utilization, and sparse production in surrounding states meant that this large price disparity did not have any adverse consequences, and was appropriate for the state's industry. Supplies were adequate to meet Class 1 and mandatory Class 2 needs, plus a reserve. Milk moving between California and surrounding states was a small portion of total Class 1 use and such shipments were fairly consistent and based on established business relationships.

Producers began to look to Class 1 price increases as a way to increase their revenues. Initial adjustments took the form of changes to the base values of milk components in the Class 1 formula. As Class 1 prices increased, alignment issues with surrounding markets took on increased economic significance because of growing milk production in surrounding states. California dairy farmers, who were dissatisfied that California Class 1 prices were lower than those in nearby states, were successful in amending the California Food and Agricultural Code (Section 62062.1):

"Any designation of a class 1 price by any method or formula that is used to develop class 1 prices paid to producers in the various marketing areas, shall provide, on a calendar year basis, a statewide weighted average minimum price level for a hundred weight of milk testing 3.5 fat and 8.7 solids not fat that is in reasonable relationship with minimum class 1 milk prices paid to producers in contiguous states. If the statewide weighted average class 1 prices paid to producers are not in a reasonable relationship with the class 1 prices paid to producers in contiguous states, the secretary shall immediately hold a hearing to consider adjustments to the class 1 prices."

My interpretation is that while this provision did not and still does not require that prices be equal to those in surrounding states, it did provide impetus for dairy farmer efforts to increase Class 1 prices through the hearing process. One change made in the mid-1990s resulted in the adoption of a Class 1 pricing formula that computed the commodity reference price (CRP) as the "higher of" a butter-powder value or a cheese-whey cream (fat) value. When prices diverged in a manner where butter-powder values were higher than those derived from cheese and whey fat, California Class 1 prices moved higher than those in contiguous states, which were calculated using a FMMO Basic Formula Price (BFP) that was linked to a Minnesota-Wisconsin (M-W) price series for Grade B milk. The M-W series tended to reflect a cheese milk value because cheese making was more dominant in the Upper Midwest than butter-powder manufacturing.

When California Class 1 prices rose to levels sufficiently above milk prices in contiguous states, milk movements into California for Class 1 use began to increase. Out-of-state milk supplies began to displace milk supplies in California for Class 1 uses and milk movements were becoming uneconomic as nearby milk was displaced by milk hauled from further distances outside the state. Hearing decisions in the mid-1990s resulted in a couple of key changes. Class 1 component based values were reduced and the "higher of" CRP was replaced by one based solely on the "cheese-whey fat" value so that prices would track better with prices in FMMO markets. Also, the pooling plan was amended to allow a portion of the revenue from Class 1 sales made by out-of-state producers to be pooled, thereby reducing the attractiveness of the California market to out-of-state producers. The pooling plan amendment was successfully challenged in court. Despite the state's lack of ability to maintain its pooling plan changes, the reduction in Class 1 prices resulted in a better relationship to prices in surrounding states and was sufficient to discourage continued growth in shipments by out-of-state milk suppliers into the market. As a result, the amount of bulk milk entering the state returned to more historically normal levels.

In the late summer of 1999, CDFA called a hearing on its own motion to consider changes to the Class 1 pricing formula. As a result of this hearing, the frequency of pricing changes was changed from bimonthly to monthly. Also, the last ties to the 1970s price formula, the base value concept was eliminated and Class 1 prices were calculated directly using the CRP. At this time, the formula took the basic structure that it retains today.

Continued "Fine Tuning" of Class 1, 2, and 3 Price Formulas. Since 2000, there have been several hearings to update the Class 1 formula. The "higher of" CRP was put in place in early 2000 to account for the fact that the "higher of" concept was employed in the FMMO Class I

formula. An important change occurs in 2006 when a dry whey factor was added to the Class 1 CRP to make it track better with FMMO Class I price movements.

In 2008, the Class 1, Class 2, and Class 3 prices were reduced to restore their alignment with comparable FMMO prices when the FMMO price levels were reduced to account for increases in the manufacturing allowances used in the Class III and Class IV formulas. In that hearing, the California dairy cooperatives' trade association (The Alliance of Western Milk Producers) had asked for a $1.00 per hundredweight increase in the regulated price for Classes 1, 2, and 3. The proposed changes would have resulted in regulated prices that were higher than those for corresponding milk classes in the FMMOs. During my time at Dairy Institute, I have observed that the California cooperatives' reliance on the "national dairy pricing grid" has generally been limited to those situations where adopting an FMMO regulated price level would have resulted in a higher price than under the California state order. The cooperatives have had little interest in advocating for price reductions, except as it pertains to the prices for classes of products that they produce in their own plants.

At various times, there have been temporary increases in the Class 1 and other class prices when dairy farm margins tightened due to high feed costs or lower dairy commodity prices. The pattern has been that CDFA has made adjustments whenever necessary to deal with changing market conditions and changing dairy price policies in the rest of the country so that milk marketing in California will remain orderly and so that the prices are set at levels that account for and are responsive to market forces originating both inside and outside the state.

Updates to Manufacturing Class formulas. Hearings were held frequently throughout the 1980s, 1990s and 2000s to adjust the milk Class 4a and Class 4b milk pricing formulas to changing cost

and market conditions. The dominant characteristic during most of this period was the rapidly growing milk supply in the state (at an average increase of more than 4% per year). The need for additional plant capacity to accommodate the growing milk supply led cooperatives and proprietary processors to seek adjustments to the formulas to keep them current with actual costs, product prices and yields so that plants could profitably transform dairy farmers' milk into products that could be marketed to consumers who were increasingly located at greater distances from the state.

Both the industry and CDFA recognized that for end product price formulas to generate milk prices that accurately reflected the value of milk to the plants that were purchasing it, manufacturing costs and yield must reflect current manufacturing conditions in dairy product plants. Likewise, the commodity price values utilized in the formulas must reflect the actual prices received adjusted for the plant's location. If these conditions were not met, then the end-product formulas would cease to have economic validity and would improperly value the milk in the various classes.

CDFA's Attempts to Properly Incorporate Skim Whey Value in the Class 4b Formula. On January 1, 2000, USDA implemented end product price formulas for establishing Class III and Class IV prices under the FMMOs. The formula for Class III computed the skim value of milk used to manufacture cheese from an end product price formula for protein, based on cheese and butter commodity values, and an end product price formula for other solids that was based on the value of dry whey. Because the federal Class III formula now used the value of dry whey explicitly, producer groups in California began to request that dry whey be included in determining California Class 4b prices as well.

The request to add dry whey to the Class 1 formula was heard at a hearing in 2001 and denied, but in 2003, in the midst of a period of low producer milk prices, CDFA decided to incorporate dry whey into the Class 4b formula. Prior to 2003, the Class 4b formula had calculated the price used to make cheese (Class 4b) as the sum of an end product formula for cheese and an end product formula for whey fat. The whey fat end product formula was based on the price of Grade B butter, which was assumed to represent the best use of the whey cream from cheesemaking operations. In 1998, the Grade B butter price was replaced with the Grade AA butter price less an adjustment of 10 cents per pound, an amount that represented the historic price difference between Grade AA and Grade B butter prices at the Chicago Mercantile Exchange (CME). That change was made when the CME discontinued trading of Grade A and Grade B butter.

The Class 4b formula resulting from the 2003 decision (which also incorporated a floor for butter, nonfat dry milk and cheddar cheese block prices at the corresponding Commodity Credit Corporation price support levels) added a dry whey end product price formula to the existing ones for cheese and whey fat. In the new formula, the dry whey manufacturing cost allowance (MCA) in the formula was set at $0.17 cents per pound of whey, and the dry whey yield was set at 5.8 pounds per hundredweight of milk at formula's assumed vat test. The whey price series uses was the simple average of the weekly Dry Whey West Mostly price as reported by the Agricultural Marketing Service (AMS) of the U. S. Department of Agriculture (USDA) in Dairy Market News between the 26th of the prior month through the 25th of the current month.

In 2005, CDFA held another hearing to consider changes to all the manufacturing class formulas, including the Class 4b formula. As a result of the testimony and evidence given, the Hearing Panel recommended that the Secretary remove the dry whey portion of the Class 4b

formula. The Secretary rejected that recommendation and instead, increased the MCA to $0.20 per pound. In 2006, CDFA held a hearing to consider changes to the Class 4a and Class 4b formulas. Again, the hearing panel recommended that the dry whey portion of the formula be removed, and again that recommendation was not adopted by the Secretary, but the dry whey MCA was increased to $0.267 per pound. That MCA level was equal to the weighted average manufacturing cost in 2004 of the California plants making dry whey according to what was then a new cost survey conducted by CDFA. Prior to 2006, CDFA did not have any California-based manufacturing costs upon which to base a dry whey MCA.

In 2007, dry whey prices spiked to unprecedented levels, topping $0.80 cents per pound on a weekly basis in the early summer, and California cheesemakers began to experience compressed margins and financial losses. In August of that year, a group of eight cheesemakers petitioned CDFA for a hearing to consider removing the dry whey end product formula from the Class 4b milk price formula. Producer groups opposed removing the dry whey factor from the formula. In its November 2007 report, the Hearing Panel said the following about trying to incorporate a value for skim whey in a cheese milk formula:

"The current whey factor in the Class 4b pricing formula that uses a dry whey specific price, MCA, and yield is not sustainable:

- ***the current formula is in itself flawed:***
  - ***the yield is not representative of what processors testify to as actual plant yields,***
  - ***the price is not representative of prices received by California cheese plants for dry forms of whey,***
  - ***the MCA is based on actual costs for dry whey plants in California, but these costs are high because most large cheese plants with potential economies of scale do not make dry whey.***
- ***most plants do not process wet-skimmed whey into a dry form of whey,***
- ***those plants making a dry form do not make dry whey.***

Those plants making a dry form of whey do not make a standard product or set of products.

Thus, it is not possible to develop a new factor using an alternative dry form of whey with its own price, manufacturing cost allowance, and yield….

…Some small- and medium-volume cheese processors are able to sell their wet-skimmed whey to producers as an animal feed. The Panel believes there is a value for wet-skimmed whey that strikes a balance among those cheese processors making a dry form of whey, those processors selling wet skimmed whey as animal feed, and those processors with no market opportunity for their wet-skimmed whey.

After carefully weighing all the relevant economic factors, the Panel believes that $0.10 per hundredweight as the fixed whey factor is an appropriate figure. Replacing the highly volatile whey factor with a fixed value would provide constant value to producers. It would limit the negative impact on producers of highly volatile whey prices. It would help to avoid the negative consequences that impacted small- and medium-volume cheese processors during 2007."

The Hearing Panel report further noted that the proposed change to a fixed-value whey factor would increase the spread between the Class 4b price and the Federal Class III price. Against a backdrop of milk supplies that were straining plant capacity in the state, the Panel noted the need for Class 4a and Class 4b prices to be market clearing and stated:

"…Remember, however, that the California minimum price is a market-clearing price while the federal order price is not. The fact that cheese processors that operate under the federal order may avoid the responsibility of paying the federal order minimum price is sufficient reason to justify the increasing spread between Class 4b and Class III prices.

In this context, the Panel is using the term "market-clearing price" to mean the price at which supply equals demand. At that price, the sellers are willing to supply exactly the quantity of goods that the buyers are willing to purchase. In the dairy industry, the market clearing price is the price at which processors are willing to buy all the milk that producers are willing to sell. In the situation under the California regulated system of classified pricing, the minimum Class 4a/4b prices must be low enough so that manufacturing plants are willing to buy all the milk that is not used in Classes 1, 2 and 3."

The CDFA Secretary modified this decision to make the fixed whey factor 25 cents per hundredweight rather than the 10 cent value that the Hearing Panel recommended, but the dry whey end-product formula was eliminated from the calculation of the Class 4b price. As a result of a subsequent hearing decision made effective in September 2011, the fixed whey factor

evolved into a whey contribution schedule (sliding scale), which was amended further in August 2012. Most recently, the whey contribution schedule was adjusted upward for one year from August 2015 through July 2016. A summary of the history of the "dry whey factor" in the Class 4b formula illustrating the major changes made through mid-2013 is contained in Figure 1.

It is ironic that the very issue that dairy farmer cooperatives are now attempting to overturn, through their petition for a California Federal Milk Marketing order, was adopted by CDFA to restore orderly marketing in the state by changing milk pricing formulas so that milk markets would clear, by allowing for a regulated price at which cheese plants could profitably operate. It illustrates that what the petitioners are primarily concerned with is getting a higher regulated price (one that is set above market clearing levels), and not ensuring orderly marketing, which has been CDFA's stated chief concern since the early days of state milk price regulation in California.

In summary, the foregoing review makes it clear that CDFA has a history of being responsive to changes in the marketplace and making needed changes in accordance with legislative directives. The state is still responsive to the need to maintain orderly marketing and an adequate supply of milk for consumers. For much of the last several years, CDFA has not made the specific changes producer groups have requested, which have to do with their desire to be paid more for their milk, rather than solving any particular problem of disorderly marketing. California dairy farmers' desire for a higher price is the fundamental reason why we are gathered at this hearing. More specifically, the state's dairy farmer cooperatives want higher regulated prices so that cheesemakers will be required to pay more for milk, and so that more of the money currently being paid by a few proprietary cheese manufacturers to dairy farmers as premiums, to

attract the kind of milk supply that is valuable to them, gets distributed to all producers through the pool.

Unfortunately, in their quest for higher milk prices, the question of what is an appropriate market-clearing price for milk used to make manufactured products, specifically cheese, gets ignored in both their proposal and their arguments; so does CDFA's history of making hearing decisions specifically directed at maintaining orderly marketing in the state and setting prices at levels which are market clearing.

II. CURRENT MILK MARKETING CONDITIONS IN CALIFORNIA ARE ORDERLY.

USDA has stated that FMMOs objectives are to: "assist farmers in developing steady dependable markets by providing prices for their milk which are reasonable in relation to economic conditions" and to "assure consumers at all times of adequate supplies of pure and wholesome milk at reasonable prices." [x] In its publication from 1989 entitled, *Questions and Answers on Federal Milk Marketing Orders*, USDA notes that "Federal Orders are primarily instruments for stabilizing marketing conditions for fluid milk." It accomplishes these objectives by setting minimum prices for various Classes of milk, establishing pooling provisions to provide for uniform prices to producers, providing market information to the industry in general and dairy farmers specifically, ensuring accurate weights and test for producer milk, and auditing handler records to ensure that they have properly accounted to the pool and paid producers. Because of the FMMO system's focus on Class I milk (fluid milk), orderly marketing is primarily concerned with ensuring that adequate supplies of fluid grade milk are available and that milk moves to Class I use where it is needed, when it is needed, and in an orderly fashion so

as to provide reasonable returns to dairy farmers so that consumers have access to adequate supplies of milk for fluid use at reasonable prices

Current Differences between California Class 4a/4b Prices and FMMO Class III/IV Prices are not Disorderly

It is no secret that regulated price levels under California's state order are different than FMMO price levels for corresponding classes. We freely acknowledge these differences, but disagree with the dairy farmer organizations over their implications. While the cooperatives argue that the differences, in and of themselves, amount to disorderly marketing, we maintain that the differences exist ~~is~~ to promote and maintain orderly marketing ~~orderly marketing~~ in the state.

Regulated price differences between different regions or different markets are neither a necessary nor a sufficient condition for disorderly marketing. While price differences can be an indicator of the potential for disorderly marketing conditions, they are by no means evidence that conditions are disorderly. We have seen no substantive evidence that current marketing conditions are disorderly. However, this issue of manufacturing class prices being at levels that were not market clearing has been a concerned ~~with the orderly marketing of milk for fluid uses, it is worth pondering why the orders establish regulated minimum prices for manufacturing classes at all~~.

While it is certainly crucial for regulated manufacturing class milk prices to be market-clearing under FMMOs, the negative consequences that ensue are exacerbated under ~~of~~ a system of pricing like the one in California where ~~were~~ virtually all milk is required to be paid at minimum prices. There is no safety valve to clear excess milk from the market under CSO pricing and

would be none under any system of mandatory pooling. The only way to ensure that regulated manufacturing class milk prices will not be at levels that create disorderly conditions is to make really certain that the regulated price levels are market clearing in the local market.

We maintain that the current FMMO prices for Class III and Class IV are not market clearing for California. There is evidence that in the recent past, California's Class 4a and 4b prices have been set at levels that were not market clearing, despite those prices being below corresponding FMMO prices. While it has been accurately stated that the market for manufactured dairy products such as cheese, nonfat dry milk, whey, and butter are national (and increasingly global) markets and that the market-clearing prices for these products are determined by the national balance of supply and demand, the statement does not go far enough. The national market-clearing price manifests itself as a surface of regional dairy product prices that vary by location. This result is derived from the fundamental economic concept of spatial equilibrium that is at work in all commodity markets that have positive transfer costs across space.

Distance to market matters. It is no secret that there are more people living in the eastern half of the country than in the western half. Therefore, the largest market for finished dairy products, particularly cheese and butter, is located in the eastern half. The production of manufactured dairy products has grown in the western half of the country to the point where those products must leave the region in order to find a market. This disparity between where products are produced and where they are consumed creates a spatial value that is lower in the West and higher in the East. If regulated milk pricing formulas fail to account for differences in spatial value of finished dairy products (and to account for current yields and current costs of manufacturing dairy products from milk), the milk will not be properly valued.

In considering what it means for regulated milk prices to be market-clearing, we have to look beyond the balance of supply and demand of finished dairy products in the national marketplace, and focus clearly on what is happening in the local (state or region) market for milk. The markets for finished dairy products clear nationally, but the market for milk clears locally. If there is excess cheese in one region of the country, it can be marketed on the Chicago Mercantile Exchange, which serves a national market-clearing function, although even in those transactions, the price is adjusted based on the location of the seller. If there is excess milk in a particular region, it cannot be hauled across the country to be sold or all of its value will be eaten away by the transportation cost associated with shipping it to its destination. Therefore, in order for marketing to be orderly and efficient, milk needs to clear the market by finding a plant within reasonable distance from where it is produced. If it cannot, then it will either be dumped or hauled long distances at great expense to find a home.

This was the situation that faced California on numerous occasions beginning in 2006, although it is my understanding that similar conditions were seen in California in the mid-1980s when milk production was growing faster than plant capacity in the state. In Figure 2 and Table 1, I have charted an estimate of plant capacity in California against the state's milk production. In the 2006-2008 period, there were as many as 19 months when milk production in the state exceeded willing capacity, necessitating movements of milk to out-of-state plants located in states as distant as Idaho, Texas, and New Mexico. From the second half of 2008 until 2012, plant capacity was in excess after a decline in milk output, the opening of new plants, and the expansion of others. But by early 2012 milk production was outpacing plant capacity again and one cooperative had to take some rather dramatic steps to reduce its incoming milk supply. Milk production ~~was~~ exceeded plant capacity once again in 2014. Milk production has been lower in

2015, but it remains to be seen whether this one-year decline from an all-time high in the state's milk output is a trend. Milk output has declined previously in the state, only to reach new record production levels in subsequent years.

Current Differences between California Class 2/3 Prices and FMMO Class II Prices are not Disorderly

Class 2 and 3 prices in California have been established relative to Class 4a, rather than Class IV or Class II, for the purpose of maintaining a reasonable sound economic relationship among the classes in California. If Class 2 and 3 prices are set too high relative to Class 4a, the result could encourage of substitution of NFDM and AMF for use in manufacturing these products instead of using fresh cream, skim, condensed and/or bulk milk. To preserve these somewhat higher uses for dairy farmers through pooling, Classes 2 and 3 must not be priced so high as to encourage dairy ingredient substitution. The same logic applies to the relationship between Class IV and Class II. However, is should also be noted that because Class II milk received at stand-alone Class II plants (or at plants with Class II and lower usage) is not required to be pooled, the establishment of different regulated prices under the CSO and under the FMMO cannot be considered disorderly. If it were the case that orderly marketing requires the same price to be paid for Class II milk regardless of location, USDA would require that all Class II plants be pooled. The fact is that they do not.

While it may be the case that differences in Class II and Class 2 and 3 pricing leads to some ability for multistate manufacturers to engage in price arbitrage by producing more product in states where the regulated price is lower, this ability is limited by manufacturing capacity at

each location. If California's average price advantage had been especially large we would expect to see California Class 2 and 3 manufacturing expanding, but there is no evidence that this is the case. In summary, proponents of Proposal one have little evidence that differences between FMMO Class II and California Class 2 and 3 prices have led to either disorderly marketing either by making it more difficult for Class I plants to obtain milk or by encouraging uneconomic milk movements.

Current Differences between California Class 1 Prices and FMMO Class I Prices are not Disorderly

Class 1 prices likewise need to be in an appropriate relationship to other classes within the market. California's Class 1 prices are somewhat lower than FMMO Class I contiguous states, but the potential for the regulated price differences to lead to disorderly marketing (attracting milk in bulk and packaged form that is not needed and resulting in inefficient milk movements) is addressed by keeping Class 1 prices in California from exceeding those in surrounding states, something CDFA has been proactive about. Bulk milk that is not priced under the CSOs has been entering California and has continued to enter, but those volumes are not increasing, but rather declining (Table 2). If lower Class 1 prices in California are sufficient to encourage packaged milk to move out of state and into FMMO marketing areas where it could undercut Class I sales from processors regulated by those FMMOs, partial regulation exists as the remedy to ensure that California Class 1 plants cannot press an advantage created by lower regulated prices. Consequently, lower Class 1 prices in California as they have been applied in recent years have not, and do not, result in disorderly marketing conditions.

Changing milk production trends in California are not disorderly marketing. Milk production in California has had a history of rapid expansion (Figure 3, Table 3). The CDFA milk pooling plan was implemented in the state in 1969. For the ensuing four decades the state's milk production growth rate exceeded that of the rest of the country as shown in Figure 4 and Table 4. The recent slowdown in the growth of California's milk output is not a particularly unusual occurrence when looking at other states. Milk production in the U.S. and several selected states is shown in Table 4 as an index, where each state's milk output is expressed in relation to its milk production in 1985 (100=1985). Major milk producing states like Wisconsin, Minnesota, and New York have all experienced declines in milk production at various times since 1985. FMMO regulated minimum prices have changed throughout the period as well, but there does not appear to have been a focus by USDA on increasing Class III or Class IV/III-A regulated prices to deal with declining milk production in these states or in the orders covering these states.

California's average annual milk output growth exceeded 4% in the 1980s and 1990s before slowing in the period from 2000-2009, and slowing further since 2010 (Table 5) as a combination of high costs for feedstuffs that are now declining (Table 6) and the impact of the state's three-year drought took hold. This year, milk production has declined substantially from last year's record high, but unlike the 2009 downturn, USDA data suggest that cow numbers have declined little, and the bulk of the decrease in milk output drop is due to lower milk per cow (Table 7).

Still, for the first four decades after pooling was introduced in California, milk production expanded much more rapidly than in the rest of the U.S., denoting milk production returns that

were, on balance, sufficient to encourage strong milk production growth. Another key point to remember in examining milk output growth percentage rates is that a large milk production base means that small percentage increases in milk output can be substantial in terms of the extra milk pounds produced. For example, a one percent annual growth rate based on California's 2014 milk output of roughly 42.3 billion pounds results in 423 million pounds per year of additional milk, while a one percent growth in Florida's milk production of 2.5 billion pounds results in additional milk of only 25 million pounds. Put another way, Florida would have to grow by 17% to produce as much additional milk as California does by growing at a one percent rate.

Dairy farm consolidation in California is not evidence of disorderly marketing. Despite the existence of an upward trend in milk output, the number of dairy farms in the state has declined in recent years, as it has in most states. The rate of the decline in the number of dairy farms appears to have increased since 2006 (Figure 5), as California dairy farmers, with their relatively larger reliance on purchased feed, were challenged by higher corn, hay and oilseed costs. They have also endured a severe milk price decline in the wake of the global financial crisis in 2009 and the resulting reduction in dairy product demand, which were events that impacted dairy farmers throughout the U.S. Most recently, the severe drought impacting California and other parts of the West has increased competition for land and water resources, and that development has created additional challenges for dairy farmers.

The more rapid consolidation of producers is not necessarily a sign of disorderly marketing or of a problem that must have a regulatory remedy. Indeed, if preventing dairy farmers from exiting the industry were a goal of FMMOs or of California's state dairy program, we would have to consider both of them to be abject failures. Rather, consolidation of dairy

farms is a natural outgrowth of differences in individual producers' cost structure, risk tolerance, access to capital, and life goals. As I just indicated, many milk producing states have experienced farm consolidation (that is, a declining number of dairy farms). In fact, in recent years, dairy farm consolidation elsewhere in the U.S. has occurred at a more rapid rate than in California (Figure 6 and Table 8).

Milk supplies are more than adequate for Class 1 Use. One thing that is clear is that despite consolidation at the farm level and a much slower growth trend in the state's milk output, milk supplies in California are adequate for Class 1 use. Beverage milk sales, a proxy for Class 1 use, are shown in comparison to total milk production in the state for the period of 1969 through 2014 in Figure 7. While beverage milk sales do not constitute the entirety of Class 1 use, the change in sales relative to production is useful for illustrating the trend. It should be noted that there are differences in how CDFA and USDA calculate California Class 1 and FMMO Class I utilization, respectively. The differences are likely small relative to the total number of pounds in the highest Class under each system.

California pool Class 1 usage excludes the exempt quota held by Type 70 producer handlers in the state that would ordinarily be regulated under an FMMO. The state's pool Class 1 use also excludes bulk milk imports from out-of-state dairy farms that are used to make fluid products, which would also be regulated under an FMMO. Finally, there are minor differences in Class 1 product definitions. Buttermilk is Class 2 in California, while it is Class I under the FMMOs. Half and Half is Class 1 in California, but Class II in FMMOs. However, almost 90% of what would be Class I milk under a California FMMO is used in whole, reduced fat, lowfat,

and nonfat milk, and therefore the general trends are not substantially impacted by the differences in CDFA and FMMO data.

Milk production in California ~~in California~~ has grown rapidly since the inception of pooling ~~as~~ and is now more than five times the Class 1 use in the state, with the reserve supply now more than four times as large as the usage for fluid purposes. Today most of the milk in California is Grade A with only 1.1% of milk in January-August of 2015 designated as Grade B.

Milk movements in California are largely efficient. The quantity of California milk moved into the state's fluid deficit areas is detailed in Table 9. This data is published twice per year by CDFA as part of its milk hauling survey. The reported hauling data largely illustrate milk movements that are efficient, with close-in milk, if it is available, serving the bulk of the needs. The vast majority of Bay Area milk comes from the Northern San Joaquin, North Bay and Solano areas. Most of the milk moving into Southern California is from Southern California or the South Valley. Milk moving longer distances does happen, but these are mostly organic milk or some type of concentrated bulk product, and volumes are generally small compared to the total milk moving to Class 1 uses in the market.

The current situation in Southern California deserves some explanation. Southern California ~~frequently~~ formerly produced an abundant supply of milk with much of it concentrated in the Chino basin. These ample supplies allowed for manufacturing plants to locate in the region that previously was dominated by plants whose primary business was packaged fluid milk or cultured and frozen products. A large cheese plant located in the region during the mid-1980s, and others (not so large) followed. The milk supply began to decline in Southern California over the past

20 years as real estate values rose rapidly. Consequently, larger quantities of milk began to move from the Southern San Joaquin Valley into Southern California to meet the processing demand in the region. Even though the largest cheese plant in Southern California closed at the end of 2007, a few stranded mid-sized and smaller cheese plants continue to operate in the region, despite the fact that milk continues to move from the South Valley under the state's transportation allowance system.

California Milk Production Costs Remain Below The Average For The Country.

Dairy farming returns in California have had their ups and downs in recent years. Figure 8 contains an illustration of how margins (dairy farm income over production costs) have varied since 2003. While there has been much testimony at CDFA hearings in the past that milk production costs are rising in California, there has been no discernable trend in margins, as good years have been followed by bad years in a somewhat cyclical pattern. The data in Figure 8 were calculated from cost of production information reported by CDFA on its website: https://www.cdfa.ca.gov/dairy/uploader/postings/copcostcomp/Default.aspx .

While the weighted average returns of the CDFA sample of farms have fluctuated over time, there is also considerable variability of costs and returns among the dairy farm sample in CDFA's survey. In Figure 9, feed costs and cost of production are shown for almost all of the farms in the sample. Data on farms that produce organic milk and those that appeared to have high component herds (most likely Jersey herds) were eliminated so that what is displayed in the graph are herds of the same general type. The data are for the fourth quarter of 2014 and were extracted from CDFA's milk cost of production feedbacks, which can be found at: https://www.cdfa.ca.gov/dairy/uploader/postings/copfeedback/ .

Milk production costs in the CDFA sample for 2014 Q4 varied from a low of $14.60 per hundredweight to a high of $25.79 per hundredweight, a range of $11.19 per hundredweight between the lowest and highest cost, and had a simple average cost for the sample of $18.82 per hundredweight. Feed costs in the sample varied from $8.71 per hundredweight to $16.26 per hundredweight, for a range of $7.55 per hundredweight of milk.

Similarly, net margins show a great deal of variability as well (Figure 10). Margins for the fourth quarter of 2014 in the CDFA cost of production sample ranged from a high of $4.89 per hundredweight to a low of ($5.84) per hundredweight and had a simple average of $2.06 per hundredweight. The point here is that individual dairy farmers experience a range of costs and profitability.

According to USDA's Economic Research Service, total milk production costs in California in 2014 were well below the national average (Figure 11 and Table 11). California's lower cost of milk production is driven by scale economies as it is in many western states. For each of the years 2010 through 2014, ERS data indicate that total milk production costs in California were below both Wisconsin's costs (by an average of $8.70 per hundredweight) and average U.S. costs (by an average of $4.19 per hundredweight).

California's Class 1 Market. As we have already noted, fluid milk sales represent a small portion of the total California market for dairy farmers' milk (Figure 7). Data contained in Hearing Exhibit 61, Table CDFA-D indicate that California's Class 1 pool utilization of milkfat in 2014 ranged from a low of 7.2% in March to a high of 8.6% in September, while the Class 1 pool utilization of solids not fat ranged from a low of 13.7% in March to a high of 16.3% in October.

Dairy Institute members represent a substantial portion (approximately 65%) of Class 1 milk processing in California, and I have regular discussions with representatives of member companies regarding market conditions in the state. I have not heard any discussions from member companies regarding: difficulty in obtaining milk supplies, inadequate supplies, large fluctuations in premiums, or inefficient or otherwise disorderly milk movements. The largest concerns that my members share pertain to the downward trend in fluid milk sales, and what they view as the "unfair" nature of the current Type-70 Producer Handler exemption in California's milk pooling laws. Later testimony from member companies will address producer handler issues.

Fluid milk sales in California peaked in 1990 and 1991 at almost 6.7 billion pounds annually (Table 12). Since then, aggregate fluid milk sales fell sharply in the early 1990s, and then stabilized somewhat, being higher in some years and lower in others until 2009. The period since 2009 has been remarkable for its sharp downward trend in fluid milk sales (Figure 12). In 2009, California beverage milk sales were 6.496 billion pounds, but declined to 5.826 billion pounds for calendar year 2014. This five-year decline in California beverage milk sales was approximately 10.3 percent. Data in Table 12 for U.S. beverage milk sales indicate that this downward trend is evident in other parts of the country as well.

The downward fluid milk sales trends have also been evident in per capita sales of beverage milk (Figure 13). Per capita sales in both California and in the rest of the U.S. have been trending lower for decades, beginning in the early 1980s for California, and as far back as the early 1970s for the rest of the U.S. In more recent years, the rate of decline in per capita beverage milk consumption has accelerated in California and elsewhere. Declining beverage milk sales pose challenges for fluid milk processors. Plant capacity does not necessarily ~~not~~ shrink

in direct proportion to, nor at the same time as, fluid milk sales. The competitive environment caused by excess fluid milk plant capacity chasing a smaller market is likely to put margin pressures on plant operators. Dairy Institute member companies are concerned about any changes in the regulatory environment that would increase the cost of milk for fluid uses. They are concerned that such increased costs would compound the challenges they are facing, and passing those costs on to consumers would certainly not improve beverage milk sales.

Retail prices for fluid milk in California are high in some markets and lower in others (Figure 14 and Table 13). Data from AC Nielsen Scantrack Reports is published by CDFA on its website. The published average price per gallon represents the weighted average of specific brands of milk within the specified market, and includes organic milk. From the monthly data reported by CDFA, I calculated 5-month simple average prices for the January-May 2015 period for Whole, 2%, 1%, and Nonfat milk for selected markets. The summary data suggest that San Francisco and Sacramento have some of the highest average retail prices for fluid milk in the country. However, prices for fluid milk in Los Angeles and San Diego, where the regulated minimum Class 1 price is actually higher, ~~show fluid milk prices that~~ are fairly close to the U.S. average. While the reason for the disparity between Northern and Southern California's retail price data is not clear, cost and competitive factors often play a role in explaining such differences.

SUMMARY

We see no evidence that a FMMO is needed to address disorderly marketing. The state of California currently has an effective pricing and pooling system for fostering orderly marketing. If, however, the Secretary concludes that an FMMO in warranted, we believe that it should

promote orderly marketing via the following provisions that are typical and operative in most FMMOs. These provisions will be discussed in more detail by other witnesses, but the subjects are introduced here.

There should be appropriate pool plant and handler definitions for the California market. As in other orders, performance requirements for supply plants and handlers, which require them to supply the Class I market in order to pool their milk, should be used in California as they are the best mechanisms for assuring that the Class I market is served. The notion of mandatory or "inclusive" pooling should be rejected as it does not provide for any positive economic incentive to supply the Class I market.

Any California order should also include a Producer-Handler definition like those currently in place in other FMMOs. The California order should have pooling regulations that treat California producer quota appropriately and in a manner that does not create disorderly marketing. Pooling provisions under the order should be consistent with the other requirements of the Act, and should not discriminate against out of state producers or producers in California that do not own quota. The order should provide for appropriate classification of milk usage and shrinkage (recognizing that certain plant technologies result in higher shrinkage). Furthermore, it is crucial that the order establish~~ment~~ accurate and economically reasonable minimum Class prices that are representative of California marketing conditions.

[i] Manchester, Alden C. and Don P. Blaney. "Milk Pricing in the United States." U.S. Department of Agriculture, Economic Research Service, Agricultural Information Bulletin 761, Washington, DC: pp 12-13.
[ii] Id. p. 13
[iii] Erba, Eric M. and Andrew M. Novakovic. "The Evolution of Milk Pricing and Government Intervention in Dairy Markets." Department of Agricultural, Resource and Managerial Economics, Extension Bulletin No. 95-05, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY: pp 7-8.
[iv] Tinley, J.M. "California Milk Control Legislation." *Journal of Marketing*, Vol. 3, No. 2 (Oct., 1938), pp 175-177.
[v] Boynton, Robert D. "Milk Pricing in California: A Description of the Structure of the California Dairy Industry and the Government Programs Under Which It Operates." Fifth edition edited by Craig S. Alexander, Dairy Institute of California, Sacramento, CA, 1995: p 12.
[vi] This section draws heavily from the following sources:

Boynton, Robert D. "Milk Pricing in California: A Description of the Structure of the California Dairy Industry and the Government Programs Under Which It Operates." Fifth edition edited by Craig S. Alexander, Dairy Institute of California, Sacramento, CA, 1995: pp 16-20.

California Department of Food and Agriculture. "History of the California Milk Pooling Program." Dairy Marketing and Milk Pooling Branches, Sacramento, CA, 2012: pp. 1-11.

Maes, Lawrence, A. "Fifty Years in the Dairy Industry." Regional Oral History Office of the University of California, Interviews conducted by Judith Dunning in 2001, The Regents of the University of California, Berkeley, CA, 2002: pp. 165-172.
[vii] California Department of Food and Agriculture "Options to Facilitate Orderly Movement of Milk to California Fluid Markets." DMB-IP-103, Dairy Marketing Branch, Sacramento, CA, 1999: pp. 2-3.
[viii] California Department of Food and Agriculture. "History of the California Milk Pooling Program." Dairy Marketing and Milk Pooling Branches, Sacramento, CA, 2012: p. 9.

[ix] Boynton, Robert D. "Milk Pricing in California: A Description of the Structure of the California Dairy Industry and the Government Programs Under Which It Operates." Fifth edition edited by Craig S. Alexander, Dairy Institute of California, Sacramento, CA, 1995: pp 16-20.

[x] Hammond, Jerome and Hal Harris. "Alternative Order Provisions to Facilitate the Orderly Movement of Milk to Fluid Markets." Issue Paper No. 22 in Dairy Policy Issues and Options for the 1990 Farm Bill, a project of the Cornell Program on Dairy Markets and Policy, Ithaca, NY 1990:pp. 1-4.