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MINIMUM RESALE PRICES FOR MILK IN MAINE ^{1/}

by

Richard D. Aplin

January 1976

No. 76-3

^{1/} Statement presented by R. D. Aplin at hearing of Maine Milk Commission, December 1975.

I am pleased to have this opportunity to testify. Maine has a new milk control law and a new Milk Commission, charged with the responsibility of looking at the problem from a fresh viewpoint. The Commission has an important opportunity - the opportunity to administer the new law in a manner that will be in the public interest.

First, I strongly urge the Commission - if establishing minimum resale prices is not mandatory under the new law, but rather permissive - to exercise that discretion by eliminating the establishment of minimum resale prices. I recommend that the Commission not establish minimum resale prices for the same reasons I set forth in the statement I presented to the joint House-Senate Committee on Agriculture on January 30, 1974. I understand that a copy of my statement has been accepted as an Exhibit and is part of the record of this hearing. Since, in my judgement, the most constructive thing the Commission could do is to eliminate the establishment of minimum resale prices, I want to briefly summarize and supplement the statement that I made to the legislative committee.

A brief historical sketch may help. The difficult economic situation of the depression years led many states to follow the lead of New York, which adopted its emergency milk control law in 1933. Many states adopted milk control laws which authorized milk control boards or similar agencies to fix minimum retail and wholesale prices of milk, to regulate trade practices of milk dealers and to fix prices at the producer level. During the depression years this was the most feasible (until an effective program at the federal level was available) way to protect producer prices and the classified pricing plan. With the

economic recovery during the late 1930's, with the growth of federal milk marketing orders and with the change from prewar surpluses to wartime shortages during the 1940's, there was a great lessening of interest in regulatory measures to restrain competition. A large number of states that had undertaken the regulation of resale prices abandoned this policy. So today, in this part of the country, there are only a few states that impose minimum resale prices on milk, namely Maine, Vermont, New Jersey and Pennsylvania. The mere fact that the overwhelming majority of the milk sold to consumers in the Northeast, Middle Atlantic and the Midwest is not subject to minimum resale price control, even in states where dairying is a very important industry, such as New York and all Midwestern states through and including Wisconsin, indicates that most state legislatures believe that this form of restriction on competition is not in the public interest. Furthermore, in those few states that have retained resale price control programs, minimum resale pricing has almost always been associated with unreasonably high margins and the retarding of the growth of lower cost, more economical means of bringing milk from the farmer to the consumer. The fact that minimum resale price control programs have discouraged innovation, progress and the development of lower cost methods of marketing fluid milk has been most significant in the last two decades, during which time markets with no minimum resale price control have been characterized by tremendous growth in processing and distribution efficiency. I will deal with this problem as it specifically affects Maine later in my statement.

So, please remember what I'm really urging the Commission to do is to totally eliminate the establishment of resale prices. State established minimum resale prices are not needed. Moreover, the state minimum resale price control programs as they have been administered here in Maine, and elsewhere historically have been poorly managed, in particular because they have based the minimums on average costs which has resulted in exorbitant

margins and excessive consumer prices. Thus, I strongly urge the Commission to eliminate the establishment of minimum resale prices - they are not needed and they have done harm without any corresponding benefit.

Now, if despite the foregoing, the Commission decides to continue to establish minimum resale prices, the only way that it can be done consistent with the public interest is to establish what I characterize as "truly minimum" prices, which, as I read your new statute, you are required to do. Indeed, my experience and knowledge convince me that the only conceivable justification for establishing minimum prices for milk sold to consumers is to provide a floor against truly unreasonably low prices, thus leaving it to market forces to establish the actual prices most consumers pay for most, if not all, of their milk. In other words, the Commission should establish such minimum prices as deemed necessary to prevent the downward spiralling of prices to unreasonably low levels, which if permitted to exist over protracted periods of time, could be harmful to competition and contrary to the public interest.

At this point, let me stress that it is difficult to distinguish between competition that is really unfair and destructive in the sense that it is harmful to the public interest, and that which is beneficial to that interest, even though it may be distasteful or injurious to some firms that cannot compete successfully. This is true especially in a time like the past two decades and the present when consumer's preferences for the various products, packages and methods of distribution are changing rapidly and when new technologies and distribution methods are having a pronounced impact upon marketing practices and the size of business required to achieve low unit costs. The mere fact that a competitor or competitors may be compelled either to become efficient or go out of business is not harmful to competition. In other words, I remind the Commission that there is a difference between injury to competition and injury to competitors. No competitor should expect to have the right to

have his form of distribution, his method of competition or his customers protected from keen, but fair, price competition.

If state minimum prices are established at truly minimum levels, forms of competition that are beneficial to the public interest will exist. Moreover competition, not competitors, will be protected. On the other hand, truly minimum prices will prevent unreasonably low prices, which many economists define as prices so low that if permitted to prevail over an extended period of time and embrace a significant geographical area would make untenable even the position of efficient, low-cost competitors. In other words, an unreasonably low price is one that is less than the costs, including a just and reasonable return, associated with the most efficient, lowest cost competitors using the lowest cost, most efficient methods of distribution. As I read your new statute, this is what your legislature has defined as the level of minimum prices to be established, if indeed the Commission decides to continue to establish minimum resale prices. Later in my testimony I will quantify for you the level of prices that would represent true minimum resale prices in Maine.

The state minimum resale price control program, as it has been administered in Maine in the past, has seriously interfered with effective competition - to the detriment of the public interest. More specifically your predecessor commission adopted and continued a program of maintaining unreasonably high margins for milk dealers, which has not only interfered with the development of effective competition, but has essentially maintained the status quo in terms of the manner in which milk is processed and distributed at a tremendous cost to Maine's milk consumers.

What do I mean by "effective competition"? I mean a situation in which innovation and change is the order of the day; in which consumers are offered milk and dairy products in a large variety of forms through a large variety of

outlets at reasonable prices; in which profits are set by competitive forces; in which the system of assembly, processing and distribution is efficient; and in which new products, new containers, new methods of processing and distribution can be developed, introduced and established if they are more efficient and if consumers want them.

The proper role of government is to foster and encourage effective competition rather than stifle competition. But the result of the resale price control program in Maine to date has been the suppression of many forms of competition. In Maine, the program has seriously interfered with effective competition and been detrimental to the public interest. Why has this happened? It's happened because true minimum prices have not been established. Established minimum prices have become market prices. Artificially high, economically unsound, minimum marketing margins have been established.

I have come to this conclusion after applying four criteria to the minimum resale prices in Maine. These criteria are reflected in the following questions:

1. Have innovation, progress and the development of more efficient, lower cost methods of milk processing and distribution been encouraged?
2. Are the minimum resale prices established by the Commission in excess of the costs, including a reasonable return, that experience and research have shown can be attained by reasonably efficient processors and distributors, when unencumbered by state established minimums?
3. Do substantial quantities of milk sell at prices higher than the state established minimums? Or do nearly all dealers and storekeepers sell milk at the state established minimum prices?
4. How do retail milk prices compare with prices in neighboring states?

Permit me to apply each of these criteria to the current Maine situation. By so doing, we will see that, judged by each criterion, the predecessor commission has not administered this program in the public interest because the minimum marketing margins established have been substantially too high.

Extent to Which More Efficient Methods of Processing and Distributing Milk Have Been Adopted in Maine

Let's look at my first criterion for judging the appropriateness of the level of resale prices, "Have innovation, progress and the development of more efficient, lower cost methods of milk processing and distribution been encouraged?" The answer to this question is "no." In fact, the resale prices established by the predecessor commission have tended to create a pattern of uniformity and rigidity, to maintain the status quo and to discourage innovation and progress toward greater efficiency which market forces otherwise would stimulate. Several things demonstrate this.

During the past 20 to 25 years, tremendous changes have occurred in assembling, processing and distributing milk. There have been vast improvements in the methods for transporting bulk and packaged milk. One of the principal impacts of this is that we no longer have isolated, local milk markets. In processing, rapid technological advances, such as HTST pasteurization, high speed fillers, materials handling equipment, growth in importance of larger sized containers, and other factors, have all operated to significantly reduce unit processing costs and increase the economies of size. For example, at one time, years ago, perhaps a plant processing 10,000 quarts or so a day was under no significant cost handicap as compared with, let's say, a 30,000 or 50,000 quarts a day plant. Today, studies have shown, when you proceed from the 10,000 quarts a day plant to the 30,000 or 50,000 quarts a day plants, there are significant opportunities to reduce unit processing costs, even assuming the same degree of managerial efficiency.

However, from the viewpoint of their quantitative impact on the costs of marketing milk and from the viewpoint of their pertinence to this proceeding, probably the most significant changes have occurred in the distribution of the packaged product from the processing plant to the retail food store. Perhaps the most important change in the distribution of milk is the fact that the large food store has become the single most important distribution outlet for milk. Here in Maine, as well as elsewhere, large volumes of milk can be delivered from plant to supermarket at a far lower unit cost than would have been dreamed possible 20 years ago, and at much lower unit cost than other forms of distribution such as home delivery or delivery to small stores that handle very small volumes of milk. In the other New England markets where there are no minimum price controls, the supermarket, followed by the dairy convenience store, are far and away the most significant outlets for milk sold to consumers. One of the factors that affects the unit cost of delivering milk to supermarkets and dairy stores is the quantity of milk delivered per delivery. This in turn is affected by the number of dealers serving the same outlet as well as the frequency of delivery by the individual dealers. The other key factor affecting unit costs of delivery is the functions performed by the dealer's routeman or other representatives of the milk dealer, frequently referred to as "in-store services." I now will discuss these topics in the order mentioned.

Permit me to do so by describing the delivery of milk by dealers to stores in markets where effective competition has existed, such as New Hampshire, Massachusetts, Connecticut, Rhode Island and Upstate New York - just to mention nearby states where the industry has been unfettered by resale price control. As I describe the modern, efficient distribution system in these other markets, I will contrast it with the delivery system as it now exists in Maine.

Number of Dealers Serving a Supermarket

In neighboring states with no state established minimum prices, a given retail food store is commonly served by one milk dealer, at the most two. It is common for the dealer serving a supermarket to provide milk under the supermarket's private label as well as the dealer's label. Whereas, in Maine, under existing price control, it is common for three different dairies to serve a given store - in fact, it's not uncommon for four different dealers to serve a particular supermarket. I should emphasize that fluid whole milk, as has been shown in research studies, is not a brand-differentiated product. Therefore, there is no real public interest served in artificially maintaining a system whereby three, four or five different dealers serve the same retail outlet.

Frequency of Milk Service to Stores

Let it first be observed that under modern methods of processing, transporting and refrigerating, the keeping quality or "shelf-life" of milk is much longer today than in the past. So, there is certainly no health or quality reason for everyday delivery of milk to stores. Because of the keeping quality of milk, and because of the efficiencies that can be realized, milk dealers in other states most commonly deliver product to a store only three times a week. I realize that some stores are served four or five times a week, but the most prevalent frequency of delivery is three times a week. Contrast that with the delivery situation in Maine, where each dealer delivers product to a particular store five times a week.

But, this far from completes the story on the frequency of service to stores in Maine. It is common practice in Maine for a representative of each milk dealer serving a large grocery store to call back to service the store once, if not twice, during the day. In other words, the routeman delivers the product in the morning, then once around noon and then later in the

afternoon, either the routeman or a salesman, dairy specialist, service man, detail man - call him what you may - comes to the store to check the dairy case, move additional product out of the cooler in the backroom of the store, price stamp the product and refill the dairy case.

The number of call-backs and consequently the total number of times the store is serviced varies somewhat from dealer to dealer, with the size of the store (large supermarkets tend to receive more call-backs) and with the day of the week (more service calls tend to occur on the food store's heavy sales days). But, the situation I have just described is commonplace in Maine. In short, whereas retail food stores in neighboring states where there is no state minimum resale price control receive a total of from three to eight delivery-service calls per week from the milk dealer(s) serving them, commonly the supermarkets in Maine receive a total of 30, 35 or more delivery-service calls per week from the milk dealers serving them. As I will demonstrate in a few minutes, even when you take into account the fact that some retail food stores have to have additional cooler storage and that some additional work is placed on the food store operator, the less-frequent service provided by milk distributors in other states is a proven method of increasing efficiency.

In fact, the excessive and expensive service provided by milk dealers in Maine to food store operators accounts for a very significant part of the excessive and artificially high marketing margins and consumer prices in Maine. Moreover, in other markets of the Northeast, where competition establishes the price that food store operators pay dealers for dairy products, the store operators typically prefer to keep the number of deliveries to a minimum. Store operators prefer to keep the number of deliveries from all of their product suppliers to a minimum because of the disruptions and the security problems.

Delivery Point of Milk and In-Store Service

In neighboring markets where there is no minimum resale price control, the milk routemen typically leave the milk and other dairy products at a cooler in the back of the store. Although the routeman may check and face up the dairy case, he does not do any price stamping of product or stocking of the dairy case - except in rather rare instances. Contrast this with the typical situation in Maine where it is common for the routeman and other representatives of the dairies to price stamp and stock the dairy display case with 75 percent or more of the product. Certainly someone has to move the milk from the back room cooler to the dairy case, someone has to price stamp the product and someone has to replenish the dairy case. But, as I will demonstrate shortly, having store personnel do this work - rather than the routemen or dairy service personnel - is a much less expensive and more efficient way to get the work done. It is less costly to have store personnel perform these functions for several reasons. First because store employees are not as highly paid as the routeman. Moreover, when store personnel perform these functions, it doesn't require a delivery vehicle (or a car in the case of other dealer representatives) to stand idle while they are being performed. In fact, in many instances, while the routeman is doing all the in-store service work, the dairy clerk of the supermarket commonly is not engaged in performing other functions. This was shown in the Case & Company study in New Jersey, which is Exhibit 10 of this proceeding.

What is the difference in the cost of delivering milk to stores with the methods and practices just described as prevailing in Maine and the cost for the same volume of milk to the same store using the modern practices and methods in neighboring states? This is an important enough question that

I would like to answer it at this time. To do so I will call upon some research on wholesale milk delivery that we at Cornell are just completing.

This research study provides the information we need to realistically determine the cost differences between the two methods described - for Maine conditions. First, a bit of background about the study.

An important phase of our research at Cornell involved conducting time studies of 30 wholesale routes in Upstate New York markets, several of which were no more populous than markets in southern Maine. Thanks to the cooperation of management personnel and the routemen we were able to make detailed time studies of these routes. We rode with each routeman and made stop watch readings for 19 separate work tasks performed by routemen at each stop. ^{1/}

1/ We actually broke the job of a routeman at a particular customer stop into these 19 small pieces:

1. Drive
2. Park
3. Prepare for delivery: which includes getting out of the truck, getting the order (if necessary), opening truck body doors, getting hand truck out or positioning liftgate, any movement from side of truck to back, and any paper work relating to the order other than price extension.
4. Select merchandise, which occurs when driver prepares to unload cases of product. This includes sliding cases to door or liftgate and selecting individual units.
5. Unload
6. Deliver
7. Return
8. Service display case
9. Rotate product in cooler
10. Handle empty cases
11. Move empty cases with hand truck
12. Extend delivery ticket
13. Have ticket checked
14. Collect
15. Obtain other material handling device
16. Arrange load, which occurs when driver moves the cases (full or empty) inside truck to balance load or to facilitate selection of product at a later time.
17. Get into truck
18. Leave
19. Delays

The actual time required to perform each task was recorded in hundredths of a minute. In addition to the elapsed time, the distinguishing characteristics of each customer were noted. These characteristics included the type of customer (e.g., supermarket, Ma and Pa store, school, etc.), parking conditions at the stop, services provided by the routeman (e.g., product brought inside or left at door or curb), delivery methods at the stop (e.g., hand carry, hand truck or dolly used to move product) and the volume of product delivered to the customer.

The recorded times and descriptive information for each work task were inspected, analyzed, classified and eventually used to establish an average or normal time for each job performed on a route - a normal time for the typical routeman in the course of a normal day's work. These were designated as "standard times." The standard times developed in this study represent the average time required for a typical, fully qualified routeman, working at a normal pace to perform the given tasks on his route. An allowance is made in our standard times for fatigue, unavoidable delays and personal time.

The standard times were then tested. One test consisted of selecting a 15 percent random sample of actual times and conditions from the approximately 500 customer deliveries observed. The standard times were then used to estimate the time required to serve this large sample of customers. The actual time spent by routemen serving each of these customers was then compared to the time estimated by the standard times. The results of the test indicated that the standard times provide reliable estimates of the time required to perform the various tasks involved in delivery.

These standard times enable us to reliably estimate the time required to serve a supermarket under our two sets of delivery methods and practices:

1. Those just described as being representative of the methods prevailing in Maine under the current minimum resale price control program;
- and 2. Those methods and practices that prevail in other states and that undoubtedly would prevail in this state if this Commission were to eliminate resale price control or even if it were to follow the legislative mandate and establish true minimum margins.

Once we have estimated the delivery service time, we can apply Maine wage rates to obtain a realistic estimate of the cost savings in distribution if milk dealers and storekeepers in Maine were able to adopt these modern methods and practices.

Let me describe the retail food store and the delivery methods and practices on which I base my cost comparison, which enables me to determine the amount by which the cost of delivering milk from a plant to a typical supermarket is enhanced due to current state minimum prices:

1. Assume a supermarket located in the Portland market area with total sales of \$47,500 per week or \$2,470,000 per year. For purposes of this comparison I chose this figure because it represents the average sales of all 177 food stores operated by Hannaford Brothers Company, Federal Foods, Sampson's Markets, Cottle's Food Center and George C. Shaw Company in 1974. ^{2/} Of course there are many supermarkets in Maine that have even larger sales volume than the average that I am assuming in this cost comparison.
2. The total dollar sales of milk and cream products by the supermarket is assumed to be \$1,587 per week, or 3.34 percent of the total dollar sales volume, which corresponds with the national average that milk

^{2/} Source: 1976 Progressive Grocer's Marketing Guidebook.

and cream represents of total food store sales according to the 26th annual consumer expenditures study made by Supermarketing Magazine (page 32). This dollar volume represents approximately 120 cases of milk and cream products per week.

3. For delivery practices currently prevailing in Maine, we assume the following:
 - a. The store is served by three different milk dealers.
 - b. Product deliveries are made five times a week by routemen from each dairy company - for a total of 15 product deliveries per week. Product is unloaded by hand and a hand truck is used for moving the product.
 - c. In addition to the five product deliveries from each of the three dealers, a total of 15 call-backs per week are made by representatives of the three dealers to service the store.
 - d. The routemen and other representatives of the three dairies price stamp and place in the dairy case 75 percent of the dairy items. Store personnel are assumed to stock the dairy case with the other 25 percent of the items.
 - e. Deliveries are made in 18 foot straight chassis vehicles.
4. For estimating the costs of serving this same store under practices prevailing in other New England markets, I have assumed the following:
 - a. The store is served by two different milk dealers. I note that this is a conservative assumption in as much as in most other New England markets, many supermarkets are served by only one milk dealer.
 - b. Product deliveries are made three times a week by the routemen from each dairy company - for a total of six product deliveries per week. Routemen unload product by hand and

use a hand truck to move product.

- c. The routeman, in the process of obtaining the order for the day, checks the dairy case but leaves the milk in a cooler in the back of the store.
- d. Store personnel move the product from the cooler to the dairy case, price stamp the product and keep the dairy case replenished.
- e. Deliveries are made in 22 foot straight chassis vehicles - not tractor trailers.

Let me present the results of applying our time standards and Maine wage rates to the two different delivery situations for our typical supermarket. The details of the cost analysis are presented in Exhibit No. 1.

First, please note that the assumptions above are conservative in the sense they tend to understate the service rendered and to understate the unit delivery cost to a typical supermarket for the present Maine conditions and, if anything, overstate the service and unit costs associated with distribution practices prevailing in other markets of the Northeast.

I should emphasize that in this particular cost comparison, as reflected in Exhibit No. 1, I am not attempting to ascertain the lowest reasonably achievable unit cost of delivering to a supermarket under conditions and practices which can be expected to prevail in Maine if minimum resale prices were abolished or if "true minimums" were established. That subject is dealt with later in my testimony and will be reflected in Exhibit No. 3. Also please note that my analysis reflects the fact that the type of plant-to-store delivery system that has become prevalent in other markets transfers some work and cost from the routeman and other dealer personnel to the storekeeper and his employees. If Maine dealers were to adopt this prevailing modern

delivery system, some store operators would have to have more cooler storage for milk and the store's personnel would have to service the dairy case. But, the costs of the added storage at the store (which wouldn't necessarily be borne by the store operator) and the added labor costs in the store are included in my analysis (see page 3) as partial offsets to the savings in plant-to-store delivery costs.

My study, as reflected in Exhibit No. 1, demonstrates that a net saving of approximately five and one-half cents a half-gallon could be realized from shifting the milk delivery methods and practices used to serve our typical supermarket from those commonly used in Maine today to the distribution methods commonly used in neighboring, competitive markets. This represents a reduction of more than 50 percent in plant-to-store distribution costs. In other words, plant-to-store delivery costs for the average supermarket are about twice as high under current Maine conditions than they would be under competitive conditions - even with my very conservative assumptions, including my assumption of two dealers serving a supermarket.

Proven methods and practices that increase the efficiency of distributing milk; and that are commonly used in many markets in New Hampshire, Massachusetts, Rhode Island, Connecticut and Upstate New York, have not been adopted in Maine, and this, as we have seen, has resulted in greatly enhanced delivery costs. Why haven't these proven methods and practices been adopted in Maine? Because the Commission has set an artificially high wholesale price, which does not take into account, among other things, the lower unit costs associated with large volume deliveries and fewer functions performed by the dealer's routemen. It should be noted that volume discounts and discounts for fewer services at the wholesale level are commonplace in most other markets because they reflect basic, obvious and undisputed ways to improve efficiency and to reduce distribution costs. In Maine, dealers cannot compete on price - they can only compete on service.

Before I leave this cost comparison, let me stress two things regarding it. The analysis which I have just presented demonstrates one reason why the Commission cannot use present actual costs of serving even a supermarket in following the legislative mandate to arrive at true minimum prices. This is so because dealers in Maine are currently incurring, even on the average, supermarket delivery, unit costs of five cents a half-gallon more than it would cost to serve that same average supermarket under modern distribution methods and practices. Second, the comparison I made, as presented in Exhibit No. 1, does not reflect the extent to which minimum margins as established by the predecessor commission have exceeded the costs that experience and research have shown can be achieved in processing, packaging and distributing milk, if dealers were not encumbered by artificially high minimum resale margins and effective competition were permitted.

Another important piece of evidence indicating that effective competition has not been fostered by the level of minimum prices established in Maine is that the sale of milk through dairy convenience stores, a proven low cost method of getting milk to consumers, has been discouraged. It is contrary to the public interest - to the interest of the dairy industry, as well as consumers - not to permit prices for different packages and different forms of distribution to seek levels consistent with the inherent cost merits of the system and with consumer preferences.

To summarize, the answer to our first criterion for judging the level of minimum prices is "no" it is not appropriate, it is artificially high. In Maine, price control to date has interfered with improvements in efficiency, obstructed progress, frozen distribution methods and practices, and suppressed effective competition.

Level of Minimum Resale Prices Relative to Costs That Can Be Attained

The second yardstick for judging whether the present level of minimum resale prices in Maine is in the public interest involves answering the question: "Are the minimum resale prices established by the Commission high relative to cost levels, including a reasonable return, that experience and research have shown are and can be attained by reasonably efficient processors and distributors elsewhere in New England and are reasonably achievable by dealers in Maine as well, if unencumbered by state established minimums?" The answer to this question is absolutely and unequivocally "yes."

My extensive experience with the costs of marketing packaged milk in comparable New England and Middle Atlantic markets clearly convinces me that the predecessor commission has established total marketing margins (i.e., the difference between Class I and the minimum out-of-store price) which are grossly in excess of cost levels that experience and research have shown can be, and are being, attained by reasonably efficient dealers distributing milk through supermarkets elsewhere in New England and are reasonably achievable in Maine as well.

I am informed that the current minimum out-of-store prices of \$1.56 for a gallon and \$.78 for a half-gallon were established by the predecessor commission. If applied during September 1975, these minimum prices provide for a total marketing margin of \$.68 for a gallon and \$.34 for a half-gallon (with raw product cost adjusted for butterfat and shrinkage). These margins are at least eleven cents a half-gallon and 28 cents a gallon higher than the costs of processing, distributing and selling milk by reasonably efficient milk dealers and supermarkets, including a reasonable return for both the milk dealer and the storekeeper.

I will address this matter in more detail later, when I discuss the minimum margins that I believe this Commission must adopt in order to reflect the lowest cost at which milk can be received, processed, packaged, and distributed within the State of Maine at a just and reasonable return to the milk dealer and retailer.

Does Nearly All Milk Sell at the State Established Minimums?

Let's turn to the third question the Commission should answer to judge the appropriateness of currently established state minimum resale prices: "Do substantial quantities of milk sell at prices higher than the state established minimums?" The answer to this question is "no." It is my understanding that virtually all supermarket milk (at least half-gallons and gallons) sells at the state established minimum prices. In effect, the state established minimums are the market prices. This need not be the case. As is demonstrated by the New Jersey experience, where I know from my own knowledge that for several years most supermarkets and many dairy stores sell milk at prices above the state established minimums. I am informed that this same condition also exists now in some Pennsylvania markets. There is no reason why the same situation would not prevail here in Maine as well, if this Commission were to establish "true minimum" prices.

How Do Retail Prices in Maine Compare With Prices in Neighboring States?

Let's turn to my fourth criterion for judging whether the state minimum resale prices in Maine are at a level that reflects the public interest. Let's answer the question: "How do retail milk prices compare with prices in neighboring states?"

I addressed this topic in detail in my statement before the Maine legislative committee in January 1974. At that time I pointed out the fact that the minimum prices for milk sold in stores in Maine at that time were substantially higher than the prevailing prices in all but two of 52 principal markets

(without resale price control) throughout New England and Upstate New York that were surveyed in January 1974. The amount by which the Maine prices exceeded the prices in these other markets, of course, varied because consumer prices for milk were not uniform in these other markets. Keep in mind that the average differences that I cited then did not take into account prices of milk sold through dairy stores, which tended to be lower in these other markets than those in regular food stores. The price for milk in the food stores surveyed in five markets in New Hampshire averaged about ten cents lower for half-gallons and 30 cents lower for gallons than the Maine prices. The price for milk in the food stores surveyed in twelve markets in Massachusetts averaged about eight cents lower for half-gallons and 23 cents lower for gallons than the Maine prices. The price for milk in the food stores surveyed in three markets in Rhode Island averaged about ten cents lower for half-gallons and 26 cents lower for gallons than the Maine prices. The price for milk in the food stores surveyed in nine markets in Connecticut averaged about six cents lower for half-gallons and about 23 cents lower for gallons than Maine prices. Finally, prevailing prices for milk in the food stores in 23 Upstate New York markets averaged about eight cents lower for half-gallons and about 20 cents lower for gallons than the Maine minimum prices. Keep in mind that cost of raw milk to dealers in all 52 of these markets was essentially the same as in Maine. Taking the average of all 52 of these other markets surveyed in January 1974, the average price of milk in food stores was eight cents a half-gallon lower than the Maine Commission minimum price and the average price for gallons was 23 cents lower than the Maine price.

Fortunately, we can use the extensive shopping surveys made on December 10 and 11, 1975, by Cumberland Farms under the supervision of Francis Alger to update the situation. Mr. Alger has presented the results of these surveys as evidence in this hearing

When I analyze the findings of these surveys as regards homogenized milk sold by supermarkets only, I reach the following conclusions:

1. There is no such thing as a single prevailing price for either half-gallons or gallons in the New Hampshire and Massachusetts markets surveyed. Milk sells at several different prices in each of these competitive markets.
2. The total minimum marketing margins in September 1975, as established by the predecessor commission for Maine, are much, much wider than the margins established by competition in these neighboring markets. I would like to offer as an Exhibit my summary analysis of the Cumberland Farms price surveys (see Exhibit No. 2). As you will see in this Exhibit, I have quantified the amount by which the total minimum marketing margins as they existed in Maine in September 1975 exceeded the total marketing margins in these New Hampshire and Massachusetts markets, as shown by these extensive price surveys.
 - a. In 27 New Hampshire supermarkets, the total marketing margin ranged from \$.20 to \$.33 a half-gallon, as compared to the Maine state established minimum margin of approximately \$.34 a half-gallon. On the average, the total marketing margin in the 27 New Hampshire stores was \$.243 a half-gallon or \$.10 a half-gallon less than the minimum marketing margin in Maine.
 - b. In the 47 Massachusetts supermarkets in which prices were observed, the total marketing margin ranged from \$.18 to \$.35 a half-gallon. The margin on half-gallons of homogenized milk in two of the 47 stores was wider than the Maine minimum

margin, but only by one cent a half-gallon. Only three of the other 45 stores had total margins within nine cents a half-gallon of the Maine margins. On the average, the total marketing margin in the 47 Massachusetts stores was \$.229 a half-gallon, or approximately \$.114 a half-gallon less than the minimum marketing margins in Maine.

We can also turn to Exhibit Number 2 to obtain a summary picture of the amount by which the minimum total marketing margins as established by the predecessor commission exceed the total marketing margins in these competitive New Hampshire and Massachusetts markets.

c. In the supermarkets located in Concord, Manchester, Nashua and Portsmouth, New Hampshire, the total marketing margins in gallons of homogenized milk ranged from \$.30 to \$.50, as compared to the state established minimum marketing margin in Maine of approximately \$.68 a gallon. On the average, the total marketing margin in the New Hampshire supermarkets was \$.426 per gallon or \$.26 a gallon lower than the minimum marketing margin in Maine.

d. In the 40 Massachusetts supermarkets selling gallons of homogenized milk, the total marketing margin ranged from \$.33 to \$.57 a gallon. The marketing margin in only nine of these stores was higher than \$.45 a gallon. On the average, the total marketing margin was \$.433 a gallon in these Massachusetts stores or approximately \$.25 a gallon lower than the minimum marketing margin in Maine.

In short, there is no question that the minimum prices in Maine have been, and are, substantially higher than the prices in markets in neighboring states where effective competition has prevailed.

Level of Minimum Prices Required to Comply With the Amended Statute
In Event Commission Decides to Continue to Establish Minimum Resale Prices

I have been critical of the level of minimum prices that have been and are currently established by the Maine Milk Commission. As I have attempted to explain, I think my criticism is justified because the state minimums have been established at levels that do not serve the public interest. Now I'd like to try to be more constructive. Please remember I am testifying now based on the assumption that you might decide to continue to establish resale prices. As I have indicated, I strongly urge you not to establish resale prices. Having reminded you of my basic recommendation, I will now testify as to the levels of minimum prices that meet the requirements of the amended statute in Maine.

I might add that your statute, as it now reads, reflects the adoption of the position that I, and many other dairy economists, have been advocating in the few other states which do fix minimum prices - that the only way in which minimum resale pricing can serve the public interest is for the minimum prices to be based upon and not exceed the lowest achievable costs plus a reasonable return. Because, as I indicated earlier, the only conceivable justification for minimum resale prices is to serve as a barrier against truly unreasonably low prices and leave it to market forces to establish the actual prices that most consumers pay for most of their milk. The great majority of milk should sell at prices above the state-set minimums - at prices that have been competitively established.

Obviously, the most important information for any milk commission to have in fixing minimum margins relates to the cost of processing, distributing and retailing milk. But the Maine legislature has recognized that only a specific type of cost data must be utilized in establishing minimum margins. I refer to subsection B of 2954(2), which reads:

The minimum wholesale price paid to dealers shall be established to reflect the lowest prices at which milk purchased from Maine producers at Maine minimum prices can be received, processed, packaged and distributed within the State of Maine at a just and reasonable return. [emphasis added]

It is vitally important to notice the verb "can be." "Can be" means to be able to do or accomplish.^{3/} The Legislature did not say "are" or "have been." The Commission's mandate from the Legislature is to be guided by the lowest costs, including a reasonable return, that can be achieved by efficient firms distributing product in Maine and using the most efficient methods, practices and forms of distribution.

I understand that Cumberland Farms has introduced its costs in this hearing. In that context I'd like to point out that Cumberland has a limited line plant, servicing exclusively its own stores (a so-called vertically integrated dairy store operation). I'd like to note that it is commonly thought that a vertically integrated dairy store operator has lower costs than other distribution methods or channels. My work indicates that this is not necessarily true. A so-called "full service" dealer - a dairy that serves a variety of different types of outlets (e.g., schools, restaurants, institutions, Ma and Pa stores, as well as supermarkets) can process and package milk in a diversified, well-managed plant and distribute it on a limited-service basis to supermarkets, to be sold by supermarkets, so that the total cost (including an adequate return) between raw milk storage tanks and the consumer check-out point may not be any higher than the costs incurred in a vertically integrated system.

Secondly, I would like to emphasize that the Commission cannot use present, actual, average cost information if it is to carry out the mandate with which the Legislature charged it. As I have pointed out, milk dealers

^{3/} Source: Webster's Seventh New Collegiate Dictionary.

in Maine have not been able to adopt proven efficiencies in the distribution operations, methods and practices. I have no doubt that dairy companies operating in Maine have considerable managerial talent. But milk dealers have been unable to adopt many of the efficient, cost-reducing practices and methods commonly used in the markets in neighboring states because of the way in which the resale price control program has been administered to date. So, there's no doubt that present, actual costs of dairy companies in Maine - even of efficient operations - are irrelevant in establishing true minimum prices if minimums are to be in the public interest and to be in keeping with the requirements of the new statute.

It is also inappropriate to use average costs. Average costs of efficient firms, even when unencumbered by price control, especially if the firms serve a significant segment of the market, are rather meaningless in establishing true minimum prices. This is especially true in plant-to-store delivery costs. The volume of product delivered to a customer, the service provided the customer, the delivery conditions and routemen compensation plans differ so much that an average unit cost of delivery for a route or group of routes, for a group of customers, to say nothing of a cross section of firms, is meaningless for purposes of establishing true minimum prices.

Thus, the type of cost information needed by the Commission, according to subsection B of 2954(2) of the amended law, is the lowest costs that can be reasonably achieved in processing, packaging and distributing in Maine markets, for milk purchased from Maine producers. This cost should include a just and reasonable return.

Using my knowledge, experience and research, I have estimated the lowest costs (including a reasonable return for dealer and retailer) that can be reasonably achieved by diversified dealers in processing, packaging and distributing paper half-gallons of milk through supermarkets in Maine. The

details of my analysis are in this statement that I'd like to offer as an Exhibit (Aplin Exhibit No. 3).

I conclude that the total marketing margin under the statutory standard should not exceed \$.230 for the half-gallon. This total marketing margin breaks down as a minimum dealer margin of about \$.140 a half-gallon, which reflects receiving, processing, packaging (including container) and delivery from plant to store (i.e., all the costs incurred by the milk dealer except the cost of raw product). Thus, the minimum wholesale price (or minimum in-to-store price) for half-gallons should not be higher than the Class I price (adjusted for butterfat and shrinkage) plus \$.140. The minimum retail or out-of-store price should be the minimum wholesale price plus a storekeeper's margin of \$.09 a half-gallon, which is sufficient to cover the in-store handling costs plus a just and reasonable return for the retailer.

Turning to the gallon, in my opinion, when we total processing, container and delivery costs, up to and including the point of delivery to the store, I see little, if any difference between the costs associated with the gallon as compared to two half-gallon containers. However, I am convinced that, on a quart equivalent basis, it is less costly in the store to handle one gallon than two half-gallon containers for the obvious reason that store personnel can handle two gallons with the same time and effort as they can handle two half-gallons. This was quantified in the 1963 New Jersey cost study commissioned by the Committee of Economists and conducted by Case & Company under the direction of Mr. Havemeyer. I also note that Mr. Havemeyer has updated this study for this proceeding and concluded that the in-store handling costs for the gallon container are between five and six cents less than the cost of handling two half-gallons.

In view of the foregoing, the total marketing margin for milk sold in gallons should not exceed \$.40 or \$.41 a gallon.

I should also stress that the total marketing margins which I recommend are approximately 11 cents a half-gallon and 28 cents a gallon lower than the margins implicit in the minimum price order established by your predecessor commission.

Probable Impact Upon Consumers, Milk Dealers and Producers
Of Removing Minimum Resale Price Controls or Establishing True Minimum Resale Pricing

Impact on Consumers

If the Commission were to remove minimum resale prices or to establish true minimums in accordance with the new statute, there would be a significant decline in consumer prices as is evidenced by the comparison of present Maine minimums with the range of actual selling prices in neighboring states. I must emphasize that this comparison reflects selling prices in markets where the Class I prices are essentially similar.

Secondly, the minimum prices would no longer be the "maximum," let alone the most common or prevailing prices. There is ample evidence already in this hearing record that if the Commission were to establish true minimums in accordance with the amended law, those minimums would not become the prevailing prices, let alone the effective maximum price. Both in New Jersey and Pennsylvania, where the state minimum prices are realistically close to true minimums, price surveys indicate that the milk purchased by consumers at the preponderance of the outlets has been, and currently is, selling at prices above the minimum resale prices.

The surveys indicate that some milk is being sold at minimum price levels. Under normal competitive conditions, recognizing the wide variation in the costs of processing and distributing milk set forth in the record of these proceedings, variations in market prices are to be expected. Some milk may

be sold at minimum price levels, but it is reasonable to anticipate that most milk will continue to be sold at prices above such levels.

I would also like to emphasize that there is no merit to the position generally advanced by milk dealers in other proceedings in which I have participated, that the elimination of price controls or the adoption of true minimums would restrict the availability of milk or result in monopoly. The fact is that in New England, the Middle Atlantic and the Midwestern states, where there has not been minimum price control for decades, those markets are all characterized by active, aggressive competition in milk processing and distribution. There is, and will continue to be, an adequate supply of pure and wholesome milk for consumers and the number of milk dealers and distributors has not declined to the point that there is anything remotely approaching monopolistic price fixing. There is no reason to believe that this would occur in the State of Maine either.

Impact on Milk Dealers

Now, as to the impact on milk processors and dealers. As I said before, a distinction must be made between injury to "competition" as opposed to injury to "competitors." The adoption of either of the programs that I recommend would not, in my opinion, be injurious to competition, although obviously some dealers will presumably lose a portion of their current markets to other milk dealers. But I emphasize again that the experience in other states amply demonstrates that a competitive, aggressive and innovative milk distribution industry can, and does, persist in the absence of resale price fixing and would exist in Maine.

Furthermore, there is no merit to the suggestion or contention that the number of milk distributors will decline to the point that the market for Maine-produced milk is threatened. It is my understanding that no New England

dairy farmer, producing an acceptable quality milk, has been without a market for his milk in the last 40 years.

Now my foregoing remarks are not to say that some Maine milk dealers will not be adversely affected by the programs that I recommend. Although the minimum prices for milk in Maine are, and have been in recent years, artificially high and although dealer margins have been artificially wide, I suspect the profits of milk dealers have not been particularly high. This is because the environment established by minimum resale price control tends to lead to excessive dealers' costs. If minimums are discontinued or if truly minimum prices are established by the Commission, milk processors and distributors will feel more intense competitive pressure. Dealers will need to adjust their operations and adopt more efficient methods and practices. Inefficient, high-cost methods, practices and operations will no longer be protected.

More intense competition will result. Some dealers will benefit from such a development; others, of course, will be seriously disadvantaged. Some milk dealers will be able to successfully adjust their operations to the more competitive situation and be better off in the long run. It is important to realize that experience in uncontrolled markets shows that management ability - not size - will determine which dealers successfully adjust to, and benefit from, the removal of resale price control or the establishment of true minimums. As in other forms of business, management is more important than size in determining who is successful. For example, look at the New Hampshire situation. Minimum resale price controls on milk were removed in New Hampshire about nine years ago. The so-called giants in the industry have not grown. In fact, although I do not have the figures, I suspect that, if anything, Hood's share of the milk business has decreased slightly. Moreover one of the other large dealers at that time, the New

Hampshire Dairy Corporation, has gone out of business completely. On the other hand, some smaller independent dairies that have been willing and able to be progressive and reorganize their operations like Idlenot, Weeks-Concord, Guimond, Turner and Cumberland Farms have grown and become important factors in the market. And, although there are probably fewer milk plants and dealers in New Hampshire today than there would have been had resale price control been retained, there is a strongly competitive situation, benefiting producers and consumers.

In short, if minimum resale prices are discontinued or if true minimums are established, some Maine milk dealers will be in for some difficult times and be required to make some significant adjustments. The decline in the number of milk plants and dealers which has been taking place will probably be accelerated. But changes in technology, other changes in the industry and changes in our economy call for fewer plants and fewer dealers. This is not a new condition, however, and it is not unique to the dairy industry. It is one of the hardships that is inescapable in a competitive system. Competition in pricing as well as in marketing services is an essential part of the competitive system under which the major part of the economy operates. It provides the stimulus for increased efficiency and for the adoption of improved, more economical methods of distribution, to the ultimate benefit of consumers, producers and many of the marketing agencies.

Impact on Dairy Farmers

Now let's consider the probable impact of either of the programs I recommend on Maine dairy farmers. What effect will the removal of resale price controls or the establishment of true minimums have on the prices received by Maine farmers?

Let me note that I addressed this specific subject at some length in my statement before the Maine legislative committee in January 1974, which statement is now Exhibit 5B of this hearing. I would like to incorporate that by reference and to supplement and update my testimony therein. My conclusions have not changed.

The half of all Maine dairy farmers who are now associated with the federal order market stand to gain approximately 13 cents a hundredweight from the repeal of resale price control or the establishment of true minimums. The other half of Maine's dairy farmers - those shipping to local Maine plants, at the very worst stand to lose on the average not more than about 24 cents per hundredweight on the prices they receive. My basic conclusion is that the worst that could happen to Maine dairy farmers, taking all of them in aggregate, is the price they realize net at the farm would decrease on the average about \$.10 a hundredweight, or one-fifth of a cent per quart or four-tenths of a cent a half-gallon. This would appear to be a rather small price to pay in terms of the overall public interest in view of the tremendous potential savings for Maine's milk consumers.

Also let me point out that there is no danger that Maine consumers will be deprived of an adequate supply of pure and wholesome milk if resale price controls are removed or true minimums are established. It has not happened in the 35 or more states that rely on the establishment of prices through effective competition. Proper health standards and state and federal control over producer prices insure an adequate supply. Moreover, nearly one half of the milk produced in Maine is now shipped out-of-state. Production could fall by nearly one half before milk would have to be imported. But more importantly, prices realized by Maine producers will decline, if at all, by such a small amount that production will not be affected materially.

Now permit me to explain in detail how I reach the conclusions on the impact on dairy farmers that I have just summarized. Approximately 40 percent of the milk produced in Maine is included in the Boston Regional market pool. This portion of Maine's milk is not affected at all by the prices established by this Commission. The Maine farmers supplying milk to the Boston Regional market, on the average produce smaller quantities of milk than those farmers who ship to local Maine plants. As I understand it the dairy farmers who ship to Boston Regional plants have average volumes about two-thirds the average volume of those supplying Maine markets. Therefore, nearly one half of Maine's dairy farmers ship to plants which are regulated under the Boston Regional federal order. This half of the dairy farmers in Maine have been unaffected by the policies of the Maine Milk Commission to date.

However, I will show that if this Commission should adopt the policy I am recommending, the incomes of the Maine farmers supplying milk to the Boston Regional market could be reasonably expected to increase. Incidentally, this half of Maine's dairy farmers - those that would benefit from the Commission's adopting the policy that I recommend - in all likelihood will not be well-represented in this hearing.

At this point I want to explain briefly what the Boston Regional market consists of and how it operates. Presently the Boston Regional marketing area includes all of Rhode Island, most of Massachusetts, southern New Hampshire and southeastern Vermont. Federal Milk Order No. 1, issued by the U.S. Secretary of Agriculture, establishes minimum prices to be paid by dealers to farmers for all milk produced for that marketing area. Most of the milk regulated by that order is produced outside the marketing area. Resale prices are not set in any part of the marketing area except southeastern Vermont, where they are established by the Vermont Milk Control Board.

Under Federal Order No. 1, minimum prices to be paid by dealers are established through a classified price plan, similar to the one which has been used in Maine markets. The price for Class I milk each month is determined by adding \$2.98 a hundredweight at plants in southern New England, and \$2.58 at plants located 201-210 miles from Boston, to the price paid in the second preceding month for milk of manufacturing grade received at plants in Minnesota and Wisconsin. The price for Class II milk is the Minnesota-Wisconsin price for the current month, except for seasonal adjustments which are small minuses in the months of heaviest milk production (March-June) and small pluses in the other months.

All dairy farmers supplying the market receive a minimum blended price each month which is based on the class prices and the percentage of the milk supply in each class in that month in the entire market. It is based on the utilization of the market as a whole - not based on the utilization of the particular dealer to whom they sell their milk. In this way, there is an equitable distribution of the benefits of the Class I market and an equitable bearing of the burden of surplus milk among all farmers serving the market. For the year 1974 as a whole, 59 percent of the milk in the Boston Regional pool was in Class I. ^{4/}

For many years, the Maine Milk Commission has set minimum class prices identical to those established under Order No. 1 for milk received at plants in southern New England. The Class I price under Order No. 1 is reduced at plants in northern New England and in New York, according to distance of the plants from Boston. For example, the town of Newport, Maine (at which there is a large supply plant for Boston) is located in the 201-210

^{4/} Annual Statistics for Federal Order No. 1 for 1974, published by the Market Administrator.

mile zone from Boston and the Class I price there is 40 cents below the price at plants in southern New England.

Because of the zone differentials under Order No. 1 (which have not been adopted by the Maine Milk Commission), the Commission's Class I prices have ranged from 14.4 cents a hundredweight at Portland to about 43 cents at Bangor, above the zone Class I prices under Order No. 1 at Maine locations. These higher Class I prices have contributed to the higher prices received by the Maine farmers whose milk has been sold in Maine markets and they have contributed to the higher prices paid for milk by Maine consumers. However, they have not been the principal cause of either result.

The half of Maine's dairy farmers supplying local Maine markets, who produce 60 percent of the milk, have been the principal beneficiaries of the Maine Milk Commission's policies of the past. Probably this was the intended result when the Maine Milk Control Act first became effective about 40 years ago.

Maine dealers have restricted their milk purchases so as to have no more than an adequate supply, plus a small reserve, for their fluid milk sales. In 1974, approximately 78 percent of their milk receipts were used as Class I milk. The significantly higher percentage of Class I milk in Maine markets than in the Boston Regional market has been the principal reason why Maine farmers supplying state markets have received higher prices for their milk.

Developments now underway will raise the percentage of Class I milk in the Boston pool and therefore the blended price to all farmers supplying that market. Another federal milk order (No. 15) has been in effect for the Connecticut market since 1959. Although the class prices have been identical in the Boston and Connecticut markets, the higher percentage of Class I milk in the Connecticut market has kept its blended price to farmers always above Boston's.

As a result of a proposal made by cooperative associations representing nearly 90 percent of the farmers for both markets, these two markets shortly will be merged into a single market. The U.S. Department of Agriculture, following a public hearing, has issued a recommended decision to this effect. The merger of the two markets is expected to become effective on February 1, 1976.

The merger will produce a higher percentage of Class I milk in the New England pool (the name selected for the new market) than has prevailed in the Boston Regional pool. A relevant question is, "What will be the effect of the higher Class I percentage on the blended price for present Boston shippers in Maine and elsewhere?"

Dr. Homer Metzger of the University of Maine and Dr. Fred Webster of the University of Vermont are just completing a study which provides a sound estimate of the probable impact of merging the Boston Regional and Connecticut federal orders. The review draft of the publication reporting their research findings is dated September 15, 1975, and is entitled, "The Economic Impact of Expanding the Federal Milk Order into Northern New England." The final publication is at the printer's - it will be a bulletin of the University of Maine.

In an advance copy of this bulletin, Drs. Metzger and Webster estimate that the effect of the merger of the two orders and the resulting higher Class I percentage will raise the blended price for dairy farmers in Maine and elsewhere who ship to Boston Regional plants by eight cents a hundredweight.

Thus, the price advantage that Maine dairy farmers shipping to local Maine dealers have enjoyed over their neighbor farmers shipping to plants regulated by federal order plants will decrease by approximately eight cents a hundredweight, beginning in less than two months.

Drs. Metzger and Webster undertook the research to which I am referring because active consideration is being given by the New England dairy industry to proposing the inclusion of the State of Maine in the New England marketing area and also to proposing the inclusion of all of New England in that marketing area.

What is the probable impact of extending the federal order to include Maine as well as the rest of northern New England? The best information to answer this question comes from the research of Drs. Metzger and Webster.

In the summary of the advance draft of their bulletin, Drs. Metzger and Webster conclude that expansion of the federal milk order to include all of New England would raise blended prices to farmers presently supplying the Boston Regional market by approximately 21 cents a hundredweight. However, that 21 cent figure includes the eight cents which they estimate federal order farmers will realize from the merger of the Connecticut and Boston Regional orders - which as we've said is a virtual certainty. Thus their estimate of the effect of the extension of the federal order on the nearly half of Maine's dairy farmers who are now producing for the Boston market is an approximately 13 cent increase in price.

In their summary, Metzger and Webster also conclude that the half of Maine dairy farmers supplying Maine markets would experience a net decrease in their returns for milk of 24 cents a hundredweight, after adjusting for expected reductions in hauling rates charged to these farmers. Moreover, this estimated decrease does not account for the fact that some Maine farmers, under the present system, may not be receiving the full benefit of these prices because of the difficulty of enforcing premium farmer prices under individual handler pools - which perhaps explains one of the reasons why individual handler pools are virtually extinct under federal order regulation today.

Of course, the impact on f.o.b. farm prices of a 24 cent decrease that Drs. Metzger and Webster estimate, is an estimated average effect. Some individual producers stand to realize a larger price reduction and others a smaller reduction. Presumably the potential reduction in prices is the reason why those Maine farmers supplying Maine dealers protest strongly against any changes from the prior Commission's policies. Further, presumably they will oppose the inclusion of Maine in the New England marketing area, so long as these policies are continued. Again I remind you that these are the producers from whom the Commission is likely to receive statements in this hearing. The other half of Maine's dairy farmers - the ones who currently ship to federal order plants and who stand to gain from the extension of the order - are the smaller producers (in general) and are less likely to be represented in this hearing.

Some persons may argue before you that adoption of no resale price controls or of low minimum resale prices will result in Maine farmers losing their local markets for milk because Maine dealers, in the absence of federal regulation, will go outside Maine to purchase their milk supply. That argument, if presented, will be unsound. All of the milk produced in the other New England states will be in the New England pool or in local unregulated or state regulated markets from which the farmers obtain a slightly higher price. That means that the milk cannot be bought from farmers in those states without paying the New England blended price, plus a small premium. When the long-haul transportation costs are added, this milk would be more expensive than Maine milk. On the other hand, Maine dealers always can obtain a supply of local milk by paying at least the New England blended price to farmers.

The worst that can happen to Maine farmers supplying Maine markets is that they will receive no premium above the increased New England blended price under the merged orders. As I've pointed out, that price will be

raised to some extent by the pending merger of the Boston and Connecticut markets. It can be raised further by including all of New England in the federal marketing area. Whether Maine is included in the New England marketing area will be influenced by the attitude of Maine farmers now supplying Maine markets. If the Commission continues to establish high minimum prices, as it has in the past, extension of the federal order to include Maine (which would benefit nearly half of the dairy farmers in Maine) is not likely to occur, because the federal government is not likely to extend the order if there is a lot of local opposition.

If the Commission either eliminates resale prices or establishes true minimum resale prices, it is highly likely the federal order will be expanded, because there is probably little doubt the farmers in Maine presently shipping to Maine controlled plants would no longer resist the extension of the federal order. In fact these farmers would probably then favor extension of the order, in which case, it would probably be extended in a fairly short time. A similar thing occurred in New Hampshire in the mid-1960's, when state established minimums were abolished in that state and the federal order was expanded rather quickly.

Of course, all of Maine's dairy farmers whose milk will be in the New England pool anyway (and that is nearly half of all Maine dairy farmers) will gain by such an extension of the federal marketing area.

In summary, adoption of no resale prices or low minimum resale prices could result in half of Maine's dairy farmers, who produce 60 percent of Maine's output of milk, losing about 24 cents a hundredweight on the average in the price for their milk. Again I stress that this is an estimated average reduction in the net price at the farm. Some individual producers would lose more, some less. This average loss amounts to one-half cent per quart, one

cent per half-gallon or two cents per gallon. The other half of Maine's dairy farmers, those who ship to federal order plants and who produce about 40 percent of the state's milk, could gain approximately 13 cents a hundred-weight.

Based on my understanding of Drs. Metzger's and Webster's research, I conclude that Maine dairy farmers in aggregate would realize a net decrease in the farm price of an average of approximately nine to ten cents a hundred-weight: $[(+.13)(.4) - (.24)(.6) = .052 - .144 = -.092]$. This amounts to about .2 of a cent a quart loss or .4 of a cent a half-gallon decrease.

On the other hand, the potential reduction in the price of milk to Maine's consumers is many, many fold this much, probably at least six or seven times as much, as this potential reduction in price to farmers.

R. D. Aplin

Exhibit No. 1

Calculation of Amount By Which Cost of Delivery
From Plant to Typical Supermarket is Currently
Enhanced Due to Current State Minimum Prices

Standard Times Used for Delivery by Routemen

I. Constant Time Element Per Customer Stop

- A. Park truck upon arrival and leave property = 1.1 min. per stop ^{1/}
- B. Fixed time per stop which includes: get out of truck, get order, delay inherent in type of customer, make out order, check ticket, open truck body door, get hand truck out, get into truck, prepare to leave - when no collection is made = 8.1 min. per stop ^{1/}

II. Variable Time Element Per Customer Stop

- A. Select merchandise, arrange load, unload full cases and load empty cases = 2.7 min. per stop + .2 min. per case ^{1/}
- B. (1) Deliver and return with a hand truck =
[(.0061 min./foot x no. of feet one-way) + .3 min.](no. of trips) ^{1/}
(2) Deliver and return with hand carry =
[(.007 min./foot x no. of feet one-way) + .3 min.](no. of trips) ^{1/}
- C. Place product in dairy case = .06 min. per unit ^{2/}
- D. Price stamp product = .5 min. + .03 min. per unit ^{2/}

^{1/} Source: Time studies of wholesale milk routes in Upstate New York markets by Department of Agricultural Economics, Cornell University, Ithaca, New York, Research Project directed by R. D. Aplin.

^{2/} G. T. Devino & R. D. Aplin, Measuring and Improving the Profitability of Milk Routes, Cornell Agricultural Experiment Station Bulletin No. 1015, May 1968.

Estimated Time to Service Supermarket Under Delivery Methods & Practices Currently Prevailing in Maine

ROUTEMEN ON PRODUCT DELIVERIES: An average delivery = $\frac{120 \text{ cases per week}}{15 \text{ product deliveries}} = 8 \text{ cases per delivery}$

<u>Task</u>	<u>Minutes Per Delivery</u>
Park truck (1A)	1.1
Fixed time (1B)	8.1
Select merchandise, etc. (2A)	4.3
Deliver & return (2B1)*	2.7 min. + (.2 min./case) (8 cases)
	.910 3 cases to case: [(.0061 min./ft.) (100 ft.) + .3 min.] (1 trip)
	.483 5 cases to cooler: [(.0061 min./ft.) (30 ft.) + .3 min.] (1 trip)
Place product in dairy case (2C)	2.34 (3 cases) (average of 13 units/case) (.06 min./unit)
Price stamp product (2D)	<u>1.67</u> (3 cases) (13 units/case) (.03 min./unit) + .5 min.
Total time at-stop per average delivery	18.9 minutes
TOTAL TIME OF ROUTEMEN FROM 3 DAIRIES = (3 dairies) (5 deliveries/week) (18.9 min./delivery) = <u>283.5 minutes per week</u>	
	at store

SERVICE ON CALL BACKS

<u>Task</u>	<u>Minutes Per Service Call</u>
Fixed time - park car in lot, walk to dairy case	2.6 .5 min. + (.007 min./ft.) (300 ft.)
Move product from cooler to dairy case, hand carry (2B2)	1.58 [(.007 min./ft.) (70 ft.) + .3 min.] (2 trips)
Place product in dairy case (2C)	2.34 (3 cases) (13 units/case) (.06 min./unit)
Price stamp product (2D)	<u>1.67</u> (3 cases) (13 units/case) (.03 min./unit) + .5 min.
Total time of service call	8.2 minutes
TOTAL TIME OF SERVICEMEN FROM 3 DAIRIES = (15 service calls) (8.2 min./call) = <u>123 minutes per week</u>	

* Assume routeman places 3 cases in dairy case which is 100 feet (one-way) from the truck and places 5 cases in back room cooler which is 30 feet (one-way) from the truck.

Estimated Time to Service Supermarket Under Delivery Methods & Practices Prevailing in Other States

ROUTEMEN ON PRODUCT DELIVERIES: An average delivery = $\frac{120 \text{ cases per week}}{6 \text{ product deliveries}} = 20 \text{ cases per delivery}$

<u>Task</u>	<u>Minutes Per Delivery</u>
Park truck (1A)	1.1
Fixed time (1B)	8.1
Select merchandise, etc. (2A)	6.7
Deliver & return (2B1)	<u>1.93</u> [(.0061 min./ft.) (30 ft.) + .3 min.] (4 trips)
Total time at-stop per average delivery	17.8 minutes

TOTAL TIME OF ROUTEMEN FROM 2 DAIRIES = (2 dairies) (3 deliveries/week) (17.8 min./delivery) = 107 minutes per week at store

ADDED TIME REQUIRED OF STORE PERSONNEL TO MOVE FROM COOLER, STAMP AND PLACE IN DAIRY CASE THE 75% OF PRODUCT DONE BY DEALER PERSONNEL IN PRESENT MAINE DELIVERY SYSTEM:

(120 cases/week) (75%) = 90 additional cases placed in dairy case (assume hand carry, 2 cases per trip) or 45 trips per week

<u>Task</u>	<u>Minutes Per Week</u>
Move product: cooler to dairy case (2B2)	35.6 [(.007 min./ft.) (70 ft.) + .3 min.] (45 trips)
Place product in dairy case (2C)	70.2 (90 cases) (13 units/case) (.06 min./unit)
Price stamp product (2D): assume done 30 times per week	<u>50.1</u> (90 cases) (13 units/case) (.03 min./unit) + .5 min. (30 times)
	155.9 minutes

TOTAL ADDED TIME FOR STORE PERSONNEL PER WEEK DUE TO REDUCED SERVICE FROM DEALERS = 156 minutes per week

Fixed Costs Per Route Day Used in Budgets

	<u>Present Maine System</u>	<u>Delivery System Prevailing in Other States</u>
Routemen labor (except commission) ^{1/}	\$35.00	\$35.00
Cost of fringe benefits (30%)	10.50	10.50
Vehicle, other than gas, oil & tires		
18 foot, used in present Maine	28.00	
22 foot, used in other states	_____	<u>35.00</u>
Total fixed route labor & vehicle costs per route day	\$73.50	\$80.50

Assumed length of average workday (44 hours/week) = 528 minutes

less time spent at plant, driving, delays and
personal time (45% of total day) -238

equals time available at customer stops 290 minutes

Fixed cost per at-stop minute =		
<u>cost per route day</u>	<u>\$73.50</u>	<u>\$80.50</u>
total minutes available at-stop	290	290
	\$.253	\$.278

Cost of Time of Dairy Representatives that Service Stores

Wages (\$5.00/hour x 8 hours) \$40.00

Cost of fringes (30%) 12.00

Car expense other than gas, oil & tires 5.40

Total cost (except gas, oil & tires) per work day \$57.40

Assumed length of average work day (40 hours/week) = 480 minutes

less time spent at plant, driving, delays and
personal time (45% of total day) -216

equals time available at customer stops 264 minutes

Cost per at-stop minute =	
<u>cost per work day</u>	<u>\$57.40</u>
total minutes available at-stop	264 = \$.217

^{1/} Commission is irrelevant to comparison because same volume of milk is being delivered.

Estimated Costs of Plant-to-Store Delivery Under Two Systems Per Week

Expense	Present Maine System		System Prevailing in Other States	Cost Enhancement Due to State Minimums
Direct route expense	283 min. x \$.253/min. =	\$71.60	107 min. x \$.278/min. =	\$29.75
Plus gas, oil & tires	75 miles x \$.145/ml. =	10.88	30 miles x \$.18/ml. =	5.40
Service calls by dealer representatives	123 min. x \$.217/min. =	26.69		
Plus gas, oil & tires	75 miles x \$.07/ml. =	5.25		6.30
Cost of added storage*				
Cost of added time of store personnel**			156 min. x \$.082/min. =	12.79
TOTAL COST PER WEEK		\$114.42		\$54.24
COST PER CASE		\$.954		\$.452
COST PER HALF-GALLON		\$.1059		\$.0557

* Cost of added storage needed at store: assume 6'x8' walk-in cooler is added, has 120 case capacity, assume 15 year life, investment of \$2,500 and cost of capital of 10%.

** Cost of added time required of store personnel to stock dairy case: assume pay of stock clerk = \$3.85/hour, plus fringes of 28% or \$.082 per minute.

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Exhibit No. 2

Analysis of Total Marketing Margins As Shown In Shopping Surveys of Supermarkets

Done By Cumberland Farms on December 10 and 11, 1975 ^{1/}

Note: Total marketing margin equals reported store price less Class I price adjusted for butterfat test and shrinkage.

<u>Market</u>	<u>Number of Observations</u>	<u>Range In Margins</u>	<u>Average Margin</u>	Amount by Which
				<u>the Minimum Margin, in September 1975 in Maine (\$.343) Exceeded Average Margin in These Markets</u>
<u>HOMO HALF-GALLONS IN PAPER CONTAINERS</u>				
Concord, New Hampshire	6	\$.22 - \$.24	\$.223	\$.120
Manchester, New Hampshire	8	.21 - .27	.243	.100
Nashua, New Hampshire	8	.23 - .33	.268	.075
Portsmouth, New Hampshire	<u>5</u>	<u>.20 - .28</u>	<u>.232</u>	<u>.111</u>
Total New Hampshire	27	\$.20 - \$.33	\$.243	\$.100
Lawrence, Massachusetts	5	\$.19 - \$.35	\$.250	\$.099
Metropolitan Boston	20	.18 - .26	.222	.121
Worcester, Massachusetts	17	.19 - .35	.232	.111
Lowell, Massachusetts	<u>5</u>	<u>.19 - .25</u>	<u>.230</u>	<u>.113</u>
Total Massachusetts	47	\$.18 - \$.35	\$.229	\$.114
<u>HOMO GALLONS IN BOTH PAPER AND PLASTIC CONTAINERS</u>				<u>Maine</u>
				<u>September Minimum = \$.687</u>
Concord, New Hampshire	6	\$.42 - \$.46	\$.433	\$.217
Manchester, New Hampshire	10	.36 - .48	.419	.268
Nashua, New Hampshire	8	.40 - .50	.444	.243
Portsmouth, New Hampshire	<u>5</u>	<u>.30 - .48</u>	<u>.400</u>	<u>.287</u>
Total New Hampshire	29	\$.30 - \$.50	\$.426	\$.261
Lawrence, Massachusetts	5	\$.39 - \$.57	\$.470	\$.217
Metropolitan Boston	17	.35 - .49	.430	.257
Worcester, Massachusetts	14	.33 - .45	.411	.276
Lowell, Massachusetts	<u>4</u>	<u>.37 - .49</u>	<u>.440</u>	<u>.247</u>
Total Massachusetts	40	\$.33 - \$.57	\$.433	\$.256

1/ Results of shopping survey offered by Francis N. Alger as an Exhibit.

R. D. Aplin

Exhibit No. 3

Estimates of the Lowest Costs That Can Be Reasonably Achieved By Diversified Dealers In Processing, Packaging & Distributing Through Supermarkets in Maine Markets - In Paper Half-Gallons

Summary

<u>Cost Item</u>	<u>Cost Per Half-Gallon in Paper</u>
Paper container and case	\$.040 ^{a/}
Processing which includes receiving, processing, packaging, cooler load out and all other plant costs except the cost of containers, milk cases and product loss	.050 ^{b/}
Direct costs of plant-to-store delivery, includes only cost of routemen and vehicles	.020 ^{c/}
Administrative and clerical, route foreman, selling and allowance for bad debt	.011
<u>Needed</u> returns before taxes - note that this figure is my estimate of what the average dealer needs for an adequate return on his invested capital	<u>.019</u>
Lowest cost for processing, packaging, distribution and overhead, plus return (receiving room to store)	\$.140
In-store handling margin - based on evidence presented by Robert Havemeyer, Case & Company	<u>.090</u>
Lowest total marketing cost including return for milk dealer and retailer	\$.230

^{a/} \$.0379 for half-gallon paper plus a \$.002 per half-gallon allowance for case purchases and repairs.

^{b/} Based on seven actual diversified plants in New York and Pennsylvania that process between 920,000 and 2,674,000 pounds a month (i.e., 17,000 to 49,760 quarts per day). These plants are participants in the Dairy Management Information System Program of Cornell and Pennsylvania State Universities. Adjusted for Maine wage rates.

^{c/} See analysis on page 2 of Exhibit (attached) for details.

Direct Costs of Plant-to-Store Delivery

Based on providing limited service delivery to large supermarket.

1. Assumptions

1. Supermarket has annual total sales of \$5,000,000 (the average size of Shaw Company stores in 1976 Progressive Grocer's Marketing Guidebook). Milk and cream sales are \$3,340 per week or 4,282 half-gallon equivalents or 240 cases per week.
2. Store served three times a week.
3. Routeman obtains order upon delivery.
4. Food store is billed by office - routeman does not collect, but has ticket verified by store personnel.
5. Routeman unloads with liftgate and moves product by hand truck into back room cooler, 50 feet one-way distance from truck.
6. Empty cases are found at delivery point.
7. 22 foot straight chassis delivery vehicle.

2. Estimated At-Stop Time Based on Cornell Time Standards

Total at-stop time per delivery = 35.9 minutes (see attached sheet)

Total at-stop time per week = [(35.9 minutes)(3 deliveries)] = 107.7 minutes

3. Estimated Direct Delivery Costs

Fixed cost of delivery: 107.7 minutes x \$.278 per minute ^{a/}	= \$ 30.02
Commission: \$.040 per case x 240 cases =	9.60
Cost of fuel, tires, etc.: \$.18 per mile x 15 miles =	<u>2.70</u>
Total costs per week =	\$42.32
Cost per case =	\$1.76
Cost per half-gallon =	\$0.20

a/ See determination of cost per at-stop minute in Aplin Exhibit No. 1.

UPSTATE CUSTOMER SUMMARY SHEET (TYPE 1)

NEWER SUPERMARKET

Customer _____ on Route _____

1. CONSTANT TIME ELEMENT PER CUSTOMER STOP

(A) Park truck upon arrival and leave property

- 1. Parking lot - Direct 1.20 min.
 - Back up 1.50 min.
 - 2. On Street .50 min.
- 1.10 min.

(B) Fixed time per stop (includes get out of truck, get order, delay inherent to type of customer, make out order, check ticket, open truck body door, get hand truck out, get into truck, prepare to leave)

<u>TYPE OF ORDER</u>	<u>Collection</u>	<u>Without Collection</u>	
Unknown	8.8 min.	<u>6.8 min.</u>	
Predeveloped	9.5 min.	6.5 min.	
Preordered	--	5.5 min.	<u>6.8 min.</u>
If manager checks ticket add:		Unknown <u>1.3 min.</u>	
		Predeveloped .9 min.	
		Preordered 1.5 min.	<u>1.3 min.</u>

2. VARIABLE TIME ELEMENT PER CUSTOMER STOP

(A) Select merchandise, arrange load, unload full cases and load empty cases 2.7 min.

- 1. no liftgate
 - (a) drop delivery: _____ number of cases x .15 min./case = _____ min.
 - (b) flat truck, dolly, or hand carry: _____ number of cases x .17 min./case = _____ min.
 - (c) hand truck: _____ number of cases x .20 min./case = _____ min.

2. with liftgate
80 number of cases x .14 min./case = 11.2 min.

(B) Deliver and Return (use one-way distance)

1. with hand truck:
50 ft. x .0061 min./ft. = 305 .3 min. = 605 x 16 trips = 9.7 min.

2. with dolly:
 _____ ft. x .0096 min./ft. = _____ + .4 min. = _____ x _____ trips = _____ min.

3. with flat truck:
 _____ ft. x .0063 min./ft. = _____ + .7 min. = _____ x _____ trips = _____ min.

4. with hand carry:
 _____ ft. x .007 min./ft. = _____ + .3 min. = _____ x _____ trips = _____ min.

(C) Return Empty Cases to Truck (if not done in conjunction with Deliver)
 _____ ft. x .008 min./ft. = _____ x _____ trips = _____ min.

(D) Handle Empty Cases (if not at unloading point)
80 cases x .03 min./case = 2.4 min.

(E) Service Display Case
 _____ number of units x .025 min. = _____ + .3 min. = _____ min.

(F) Rotate Product in Cooler (if done) .7 min = 0.7 min.

(G) Route Bookkeeping per customer (if done).25 min. = _____ min.

TOTAL = 35.9 min.