Comments before the Pennsylvania Milk Marketing Board

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Members of the Pennsylvania Milk Marketing Board,

I appear before you today at the request of the Secretary Redding and the Pennsylvania Department of Agriculture. As you know, I and my colleagues have been working with the Secretary and the Pennsylvania Center for Dairy Excellence during the last year to describe and enumerate the economic status of the Pennsylvania dairy industry and to assist in the identification of strategies to improve the economic standing and viability of the industry. You have been provided with copies of the various reports that have been written in various combinations of authorship by Charles Nicholson, Mark Stephenson and myself. I will be happy to respond to any questions you may have about these reports, but my purpose today is more to share my personal perspectives with respect to the purpose of this Hearing and concerns or comments related to the performance of milk price regulation in the Commonwealth and under the purview of the Board.

Historical Underpinnings and Rationale for State Milk Price Regulation

To understand the whys and wherefores of milk price regulation in the US one must begin with an understanding of the origins of milk price regulation in its various forms.

US Milk Price Regulation is Unique

Milk price regulation today is dominated by the Federal Milk Marketing Order system, but it includes a variety of regulations that exist under State legislation. The predominant form of milk price regulation is classified pricing and pooling. This pricing system was developed and implemented by milk marketing cooperatives in the Boston market in the late 19th Century. By the early 1930s, milk sold in some 60 city markets around the US was marketed under some form of classified pricing and pooling. This became the model for the government enforced pricing systems under federal and most state price regulation.

While there are a number of other sectors of the US economy where prices are regulated by federal and state laws, including utilities, labor, interest rates, local

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transportation systems, certain specialty crops, and so on, I think I am on safe ground to assert that no industry is as thoroughly regulated and certainly none in the same manner.

<u>Early Efforts and their Rationale</u>

All of this legislation traces to the economic and social calamity of the Great Depression. Indeed, this unprecedented event gave rise to government intervention in economic life that previously was not only unheard of but unthinkable. The first Farm Bill was written in 1933 and during the ensuing decade major agricultural policies were written and re-written almost annually. It wasn't until 1937 that the current Federal Milk Marketing Order system was legislatively fleshed out but even at that the language of the law was permissive, not mandatory. It was not until the 1960s that the Federal system regulated more than half of the US milk supply.

At the same time that farmers were approaching Washington for help, their voices were also heard in State capitols around the US. The first State milk price regulation was passed in Wisconsin in 1932, prior to the Agricultural Adjustment Act in the Spring of 1933. Wisconsin rescinded its price regulation in 1941. The second State to regulate farm milk prices was New York. Its 1933 Milk Control Law remains in effect and still actively regulates about 500 million pounds of milk annually marketed in the Buffalo and Rochester markets of western New York. In all, 29 States had some form of milk price regulation at some point in time.

States that opted out tended to do so for one or more of three reasons. A chief reason was simply to defer to federal authority, which was essential in markets that involved a large share of trade over state borders. Wisconsin would be an obvious example. Another reason was simply that the State government did not want to or could not find a legislative formula that was acceptable to the majority of its citizens and effective in dealing with the problems of the dairy industry. In some states, legal challenges to the form of State regulation did not survive the review of their Supreme Court. Thirdly, a few States sought to partner with the federal government; so as to retain some influence of State elected officials while using the broader regulatory authority of the federal government. New York was one such state. Pennsylvania was a state that got off to a rocky start but which maintained a separate state program and still does.

Forms of Price or Market Intervention

It perhaps goes without saying that the collapse of farm prices in the 1930s was the primary justification for the rapid development of government price regulation. However, this begs the question why did prices collapse. The why provides insights into the how of government regulation. If milk prices collapsed due to some remarkable and unforeseen combination of market events, we might have taken more of an insurance type approach to protecting farm incomes. However, the history of the late 19th and early 20th Centuries gave rise to concerns that economic power was concentrating in the hands of firms in the middle of the supply chain, the companies that in dairy we would call processors. It should be recognized that there was no middle of the supply chain until the last half of the 19th Century, but as the physical and economic systems to move products from primary producers to consumers began to take the form we take for granted today, many parts of the US economy generated concern about excessive market power that was taking unfair advantage of labor, farmers and consumers. This gave rise to general competition law in the form of the 1890 Sherman Act and the 1914 Clayton Act. These general economic regulations did not solve the problems of agriculture. Indeed to some degree they inhibited the ability of farmers to work together cooperatively until the Capper-Volstead Act was passed in 1922.

Forms of State Regulation

The forms of state pricing regulation varied considerably. Some states were willing to be quite a bit more aggressive than the federal legislation. In some states, simple licensing rules were put in place that allowed states authority to monitor transactions and leverage some influence on economic behavior. Some states promulgated rules about retail pricing in relation to cost, believing that using milk as a "loss leader" in grocery stores ultimately depressed farm prices. Some states developed farm price controls much like were and still are in place under Federal Milk Marketing Orders. Quite a few states took price regulation further and established price rules for beverage milk at wholesale and/or retail levels. Indeed, federal legislation originally included wholesale and retail price regulation, but it was short lived.

Price controls downstream from the farm are generally referred to as "resale" price controls. They were only used for beverage or Class I milk products, as these markets were the largest single usage of milk nationally and the demand for these products were widely judged to be so inelastic as to be able to tolerate higher prices without undue sales effect, thus increasing total revenues for farmers. In most cases, minimum prices were established, with the idea that it was fair to all parties to establish a minimum based on the prices fluid milk processors (bottlers) were required to pay for farm milk, plus a fair and reasonable return for the bottler and/or retailer. In a few cases, maximum prices were set at the retail level to provide a measure of assurance that consumers would not be gouged.

Resale price controls are a distinctive feature of the current PMMB, which is the only State remaining in the US to have this total supply chain price regulation for beverage milk products.

Current State Price Regulation

Today, California, which at some 20% of the US milk supply is far and away the largest milk producing state, is on the brink of ending its own system of classified pricing and pooling and joining the Federal Order system later this Fall. At that point, some 80-85% of milk marketed in the US will be priced under Federal Order rules. At that point, Pennsylvania will become the largest State regulated area, with about 1-1.5 billion pounds of milk per year. New York will come in at second. The other remaining states are minor contributors to the US milk supply, including Nevada, Montana, North Dakota, Virginia, and Maine. A few other states have laws that permit regulation but do not currently use it and at least one State, Massachusetts, has a program that provides financial assistance to its farmers under certain conditions using tax dollars, not price regulation. New York has a lightly enforced law that is in effect a maximum pricing law for beverage milk sold in New York stores. The rationale of the law is more to protect consumers from price gouging but it was also justified as a way to ensure dairy farmers had at least a 50% share of retail milk prices, at least as represented by the minimum Class I price.

Possible Issues with State Milk Price Control

As noted above, many states that tried to regulate prices ceded authority to the Federal system because they could not effectively regulate milk sold across state boundaries. Part of this was just normal business patterns, but it is also the case that aggressive state milk price regulation can motivate out-of-state transactions that occur primarily to avoid regulation. Where we see state price regulation today is clearly in states or parts of states that enjoy a certain economic isolation. This clearly includes Nevada, Montana, western North Dakota, and Maine, but central Virginia, central Pennsylvania and western New York also have a bit of protection afforded by topography, small populations, or political boundaries.

In the case of western New York, the State Order had to be modified significantly when a major national processor bought a fluid milk business in Erie, PA and aggressively invaded Buffalo markets. Essentially the State Order Class I prices were lowered to remove the advantage of the federally regulated Erie processor but at the same time about half of the western New York milk was moved to the federal order market, Order 2 at the time, to re-balance producer blend prices between the federal and state regulated producers in western New York. This is a prime example of the limits of state milk price control.

<u>Resale Price Controls</u>

Although resale price controls were tried in various combination in other states, Pennsylvania is the only State that still establishes a system of resale price controls for beverage milk, and it is a sophisticated system at that, with the ability to establish prices between processors and retailers (wholesale) and retailers and consumers (retail), for an array of specific products, with possible variations by geographic regions and allowances for customary marketing practices such as frequency of delivery to stores.

It is well to note the underlying logic of this system, as was alluded to earlier.

Minimum farm price regulation exists to ensure that prices paid by processors to farmers or their cooperatives are by some measure fair and do not allow buyers to unduly exert whatever market power they may have. The fact that minimum prices are established is simple proof that the concern is for prices that would be too low, not too high. While we might today think of any number of reasons why farm prices could become too low, including some that have nothing to do with market power concerns, the historical rationale was based on the presumption that farmers could not effectively bargain for a fair price for milk without government assistance, even if they were organized as marketing cooperatives. Today, the stated rationale for the Federal Milk Marketing Order system is to establish farm prices that encourage the efficient movement of (fluid) milk to consumer markets. We can debate the relative importance of market efficiency vs. price equity for these policies, but I think it is clear that producer support for these programs hinges on the latter.

Minimum resale price regulation also derives from a belief that failing to establish minimum prices downstream from farmers would ultimately undermine farm prices simply due to competition among processors for their customers, among retailers for their customers, or between processors and retailers. This derives from the belief that markets for beverage milk products are highly competitive at the retail and wholesale levels. While the nature of this competition may be somewhat different in the 21st Century than the 20th, it is still generally recognized that beverage milk products are one of small group of products that are purchased frequently by a large percentage of store shoppers. This simple fact translates to store pricing strategies that require the price of milk to "be right". In other words, it is believed that milk is a product many consumers will use to choose the grocery stores in which they shop either on a regular basis or from one week to the next. Stores will routinely feature a milk item in their weekly flyers and boast about what a good deal they offer. They will study what their competitors are doing and offer a counter. This does not mean that they give away milk. Indeed, the label of loss leader is seldom accurate in describing the profitability of milk products in the dairy case, but it routinely means that at least one item will be offered at a significant discount and promoted as such.

It is this highly competitive environment that leads to part of the justification for minimum prices. It is believed that absent minimum price regulation there would be a race to the bottom for milk prices, beginning with food retailers. There is no small justification for this concern in the evolution of milk pricing in Europe over the last 20-30 years and perhaps nowhere more famously than the United Kingdom. The federal system is based on the belief that minimum farm prices are sufficient to address this concern, but the system of resale price controls attempts to ensure that. Arguably, resale price controls also ensure that price competition within a market level, wholesale or retail, is not biased towards more powerful business entities.

Establishing the Right Price Level – Not High Enough

A recurring concern or issue, especially in today's highly volatile market, is why do federal or state milk pricing systems allow farm milk prices to dip below average costs of production for many farmers, sometimes the majority of farmers. A common companion to these concerns is reminders that founding legislation for these price regulations often include language about minimum prices being established in relation to farm costs of production.

While is it undeniably true that cost of production language was common in founding legislation and most if not all these federal and state statutes contain such language, it is also true that this legislation was written with or modified later with language that adds other criteria or caveats. The federal legislation was originally written to require USDA to implement prices that were fair to farmers and consumers, implying that it was possible for minimum prices to be too high. In the Agricultural Act of 1948 language requiring USDA to consider the balance of market supply and demand was specifically added. As noted in exchanges with PMMB in 2009, the Pennsylvania milk control law contains similar language that recognizes that using cost of production reasoning to establish a price so high as to simply encourage the flow of out-of-state milk into Pennsylvania and displace local milk is self-defeating. This is not a fantastic scenario, as was evident when we briefly explored coordinated state milk pricing through the Northeast Interstate Milk Compact.

For much of the 20^{th} Century, the US attempted to support a minimum price of milk through the Milk Price Support Program. That policy began its death throes in the 1980s when an overly aggressive use of it bankrupted the system, but it became economically infeasible when we decided to open our doors to world markets in the mid-1990s. The fact that we now have essentially free trade, with the possibility of both exports and imports, makes it completely infeasible to establish US prices that deviate much from international prices based on easily transported commodities such as skim milk powder and butter. This is the challenge of interstate commerce taken to the next level.

In this market environment, price regulation has a very limited ability to significantly alter market prices. As a result, our attention at the federal level has turned to income subsidies. In other words, we realize we can't fix the (broken) price so we instead simply try to lessen the pain when those periods occur.

To some extent, this is the underlying logic of the Massachusetts tax-based support for its dairy farmers.

<u>Establishing the Right Price Level – Too High</u>

In the time that I have recently spent in Pennsylvania, one of the surprises has been to hear some farmers passionately complain that minimum retail milk prices are too high. This criticism seems to come from two different perspectives that both end up being seen as penalized Pennsylvania sales. One concern seems to be that retailers just outside the Pennsylvania border are able to steal sales for Pennsylvania stores by undercutting their prices. Presumably this doesn't reduce sales in general but it would reduce sales by Pennsylvania stores.

The second argument is that consumers would buy more milk if prices were lower. On the surface, this is Economics 101; however, it runs counter to two general accepted beliefs relative to dairy.

The first is that consumer demand for beverage milk is inelastic. To be inelastic does not mean consumers are immune to higher prices but rather that their response to a higher price is minimal. By the same token, their response to a lower price, though positive, is also minimal. This condition says that if we see changes in milk consumption over time, which we surely have, it is driven by something other than the retail price of milk. I believe this to be true.

The second dairy assumption that the "too high" argument runs into is the notion that retailers have market power but also face a high level of competition among one another. These two factors are believed to create a condition that would cause a "race to the bottom" in milk prices, which ultimately would be very detrimental to farmers, even if it would be enjoyed for a time by consumers. I also believe that this argument cannot be dismissed entirely, and again I would point to what happened in the UK after its milk pricing authority was dismantled.

Stranded Premiums

The fact that only about 10-15% of Pennsylvania farm milk production directly receives PMMB premiums but 100% of its retail stores sales are covered by minimum price requirements has led to a very passionate concern that the lion's share of retail premiums is "stranded" at the retail level and fall into the pockets of retailers as some kind of excess profits. I don't know to what extent these "stranded" premiums come from milk purchased from regulated Pennsylvania wholesalers, but the magnitude of these retail premiums is at least different depending on whether the store supplier is regulated in-state or unregulated out-of-state.

As someone who mostly sits outside of Pennsylvania, I can attest that it is frequently argued that the regulated Pennsylvania Class I premium has created an anchor point for competitively negotiated premiums in neighboring states. Premiums have collapsed as a result of excessive supply of milk the last three years, but prior to that I would say this general argument has merit and anecdotal evidence certainly confirms it. To the extent this is true, the cost of out-of-state packaged milk to Pennsylvania retailers may not be quite the bargain that is imagined. Certainly, I would find it unlikely that an out-of-state processor, who knows regulated milk prices as well as anyone, would have a business strategy that did anything less than negotiate the minimum price difference that would still earn him the sale.

Lacking hard evidence on the actual gross margin on packaged milk in Pennsylvania grocery stores, I don't think we can say much about the prevalence of the so-called stranded premium phenomenon. I suspect it is less of an issue in magnitude than many producers fear. It may well be more of problem today than a few years ago when competitive premiums were more robust.

Pooling and the Distribution of Benefits

Pooling, or the sharing of diverse market revenues more or less equally across all farms, has been hand in hand with classified pricing since the system was created 120 years ago. The fundamental purpose of pooling is to take advantage of increasing total revenue through classified pricing but avoid destructive competition among farmers if that revenue was not shared across all farms. Only a set of farms will actually ship milk to high priced Class I markets but a much larger number of farms theoretically could do so. If we didn't have pooling, we have ample historical evidence that farmers would undercut one another to get to the high-priced market and in the process they would create their own race to the bottom.

We see this in the marketing actions of certain farmers in the 1990s and 2000s and in many respects this is precisely what is happening in Pennsylvania today.

In the early days of classified pricing and pooling, during the late 1800s and early 1900s, transportation costs were a significant deterrent to long shipments of milk. It was possible to ship milk from northern New York to New York City by train in box cars that held milk cooled by ice surrounded by saw dust, but this was a costly business. It made sense to use nearby milk to supply New York and other big city markets. But, there is always some milk that sits just on the edge of this nearby and that milk is always eager to get the higher city price. One hundred years ago, markets were organized to pool nearby milk and the adjacent supplies that would only really be needed in the Fall and to exclude more distant milk that was never needed and too costly to regularly compete. As transportation systems became more efficient and fuel has been relatively cheap, we have evolved to a system where basically anyone's milk can plausibly go to the city market, and we pool everyone.

This underlying economics applies to state milk price regulation but the systems for pooling evolved differently and are not designed to deal with the phenomenon of destructive competition. Federal Orders have evolved to use what is called Market-wide pooling. This is the familiar system where all the prices paid by all regulated buyers are pooled and farmers are paid a weighted average, blend price from all those sales. The system used in Pennsylvania, other states and at one point in some Federal Order markets is called Plant-based pooling. Few fluid milk processors only produce Class I products. Some Class II volume is normal; Class III and IV much less so. Whatever the balance, a regulated processor will have some volume, probably large, priced at Class I and the remaining volume priced at a lower use class. Under a Plant-based pooling system, all the farmers supplying to a plant will receive a blended price, but the average price will vary from one plant to the next based on their individual utilization. Moreover, farmers who don't supply to those plants are entirely outside of the system and have no blended price to receive. This is in marked contrast to a Federal Order marketwide pool where it is normal for farmers whose milk never goes near a Class I plant to receive a marketwide blended price through their cooperative.

The simple fact that the Pennsylvania system continues to use Plant-based pooling means that farmers who ship directly to a regulated plant will receive the lion's share of the regulated premium. Cooperatives who receive some Pennsylvania premium probably do what cooperatives routinely do everywhere else in the US, which is to blend all market premiums and pay them out in a pooled manner to all their members. Doing this obviously dilutes the Pennsylvania premium and all the more so for large cooperatives who have a lot of milk that does not qualify in the Pennsylvania system. Any direct ship farmer who sells to an unregulated plant, perhaps in a nearby State, of course receives no Pennsylvania premium.

Whether or not this is right is not for me to judge, it is simply a consequence of this type of pooling and its effect is hardly unique to Pennsylvania. I would say that it is for this reason of farmer equity that Federal Orders stopped using this system decades ago.

Legislative Options

The purpose of your current hearings is to consider legislative options to the law under which you currently operate. I do not see it as my role to advise you or the Pennsylvania dairy industry as to what you ought to do, but I will comment on three items that I think may be on the table.

1. Marketwide pooling.
2. Increased data collection to improve policy analysis and decision making.
3. Alternative methods to support Pennsylvania dairy farmers.

Marketwide Pooling

Changing the distribution of Pennsylvania Class I premiums from a Plant-based pool to a statewide pool would directly address the issue of Pennsylvania farmer equity, especially if it was distributed directly to Pennsylvania shippers and not filtered through marketing cooperatives. There is no question that this would dramatically change the distribution of benefits, although of course it would not change the total amount of premiums collected from regulated handlers.

Whether or not this is a good idea is more of a political question than an economic one.

Increased Data Collection

I am an empirical economist. I can offer insights from economic theory and logic, but without data there isn't a lot I can say and less that I can conclude. As we noted in our report, the current regulation is long on reporting regulated prices but short on reporting quantities regulated. This is in rather sharp contrast to Federal Milk Marketing Orders and other state regulated areas.

Given my personal orientation, it is no surprise that I would encourage you to develop solid data that describes milk production and regulated milk volumes. Concerns about things like "stranded premiums" also make it appealing to collect more information about retail sales of packaged milk. By the way, this kind of information is not reported by Federal Orders on a monthly basis, as it is not essential to the pool calculations, but even Federal Orders have periodic reports of packaged milk sales by type and channels of distribution.

As was noted in your 2009 discussions, you would require a new authority to collect this kind of data, and licensing was mentioned as a regulatory vehicle for that kind of data collection. As you probably know, New York's Department of Agriculture and Markets has a processor licensing rule that allows this sort of data collection. This is a common state tool.

Your 2009 discussions also voiced a concern that I would describe as regulatory burden. I believe there was some concern about asking too much of food retailers, who assuredly would protest any additional reporting about their private business volumes. It is not for me to judge the public interest in asking food retailers to provide this information, but I would offer a couple of comments.

1. The regulatory burden is not as high as it would have been prior to the widespread adoption of scanners. This is now largely a question of programming.
2. It would be reasonable to have a *de minimis* rule that would exempt small stores from any reporting requirement beyond perhaps an annual verification that they are indeed below the "too small" threshold.
3. I would encourage you to consider universal reporting and not try to pre-identify some subset of "importing retailers". At one level, I don't know how one identifies an importing retailer if you don't have information on all retailers (allowing for #2). Secondly, I think there is incredibly valuable information in looking at the entire

market, given the dramatic changes in Class I product markets. One really needs to know share of the total market not just the volumes in one supply channel.

4. The regulatory burden could also logically be restricted by not requiring data reporting on all Class I products. Finding out that a large share of, say, lactose free milk comes from out-of-state processors would be no great insight and arguably has little if anything to do with Pennsylvania pricing.
5. Lastly, if there is a serious concern about regulatory burden, a law could be passed to enable enhanced data collection on a trial basis to allow a period of 2 to 3 years of data analysis with a sunset provision that would require explicit action to continue beyond a termination date. I would suggest that at least a one year plan is necessary for this to be at all worthwhile and a bit longer would allow the collecting agency to work out the inevitable kinks as well as ensure that the one year collected was not an aberration.

<u>Alternative Forms of Regulation to Benefit Producers</u>

Either in addition to or instead of, Pennsylvania should consider ways in which it can advance its industry outside of price regulation. Price regulation can possibly deal with issues of unbalanced competition or volatile markets but it has little if anything to do with helping an industry be more competitive or innovative over time. Over time, I have come to the conclusion that price regulation can slow the pace of economic change but it cannot overwrite basic rules of economics and competition. Indeed, I would say that the fact that Pennsylvania has the second largest numbers of dairy farms despite being only fifth in volume of milk production is evidence that Pennsylvania's regulation has had this effect. Obviously, the prevalence of Amish farmers is an important part of your farm structure but this does not negate the possibility that your system has enabled that community.

Arguably, there could be other mechanisms to provide more targeted or event specific relief to farmers than an ongoing premium program. Again, the Massachusetts tax-based program is an example. Vermont's occasional income subsidies is another. A major issue in this regard is the source of funding. Programs like the one in Massachusetts or the federal MPP-Dairy program involve or potentially involve tax dollars. The Pennsylvania program involves consumer dollars. Tax funded programs tended to be a good deal for consumers, and can even result in lower consumer prices over time. Obviously that is not true with programs that raise consumer prices, no matter how well intended or otherwise justified. These are public policy choices, but they nevertheless are choices that the Pennsylvania legislature could consider. For example, a value-added type of tax on dairy products produced and sold in Pennsylvania could create a pot of money that could be used to support or otherwise advance dairy farming. This would be a relatively easy tax to collect from a mechanical perspective. It takes public policy into waters largely uncharted in the US, and that is not a trivial matter.

Final Comment

Thank you for the opportunity to share these observations and ideas. I look forward to your comments or questions, both now and in the future.