

Testimony of Milk Producers Council  
Class 4a and 4b Hearing  
California Department of Food and Agriculture  
October 10, 2007  
Presented by  
Robert Vandenheuvel  
General Manager

Mr. Hearing Officer and Members of the panel, my name is Rob Vandenheuvel and I am the general manager of Milk Producers Council. MPC is a producer trade association with an office located in Chino, California and approximately 100 dairy members located primarily in Southern and Central California. My testimony today is based on positions adopted by the board of directors.

**Opposition to the Petitioner's Proposal**

The Secretary called this hearing in response to a petition submitted by the specialty cheese makers who contend that the current 4b formula must be radically changed by eliminating any producer value for whey solids because they are unable to capture positive whey solids value from the market. In an August 21, 2007 letter to the Secretary opposing the call of this hearing, MPC pointed out that while the specialty cheesemakers may be limited in the value they can derive from the whey solids stream, they are able to capitalize on the fact that they are selling a specialty cheese product that has a substantially higher market value than the 40# block size of cheddar cheese, which is the product value that sets the class 4b price. We still assert that the specialty cheesemakers do have the ability to recover higher values from their cheese because their products are worth more and should therefore normally be able to pay the minimum price established by the current 4b formula. Therefore we adamantly oppose the petitioners' proposal to eliminate a positive value for the whey solids portion of the class 4b formula.

That being said, we recognize that the dry whey market has been anything but normal over the past six months. We appreciate the price shock that cheese plants have faced. Producers too have experienced sticker shock as this spring, hay and grain dealers explained the new price realities of the feed market to them.

MPC also recognizes that in the past two class 4b hearings, the hearing panel has been very sympathetic to the arguments of cheesemakers regarding not paying producers for the value of whey solids. MPC, as well as all producer groups in California, strongly believe that producers are entitled to a share of the value derived from whey solids. The prices paid for whey solids products over the past six months should prove once and for all that there is a real and substantial value to the whey solids derived from cheese making activities.

MPC has asserted and continues to assert that Section 62062 and Section 62076 of the Food and Agricultural Code, under which California's minimum milk pricing formulas are established, require that producers receive a share of the value earned on the milk we

produce, because of the net values of those products and in order to keep CDFA-established milk prices in a reasonable and sound economic relationship with the national value of milk for manufacturing purposes.

We recognize that the challenge is how to appropriately construct a formula that will equitably distribute these real whey solids values to producers. Dry whey powder has historically been viewed as the lowest value whey solids product and therefore the proper surrogate for determining a net value of the whey solids stream. The Federal Milk Marketing Order program set the pattern for this when they adopted a dry whey value in the FMMO class III formula.

So what should we do given the realities of this hearing? In an effort to offer a compromise that would address the small cheesemakers' concerns, Milk Producers Council collaborated closely with our producer colleagues and developed a unified producer alternative proposal. In our memory this is the first time since 1997 that this large a share of the producer community has joined together on a major milk pricing issue facing our industry.

### **The Unified Producer Proposal**

The unified producer proposal would establish a credit against the class 4b pool obligation for every pooled cheese plant in California, equal to the net value of the whey solids portion of the class 4b formula price for the equivalent of up to two loads of milk per day. According to data supplied by CDFA, this pool credit would completely relieve 35 of California's 60 cheese plants from paying for the value of whey solids. It would also represent substantial relief for a number of other plants. In our view this is a very fair offer. What we seek in exchange is a "snubber" that will prevent the whey solids value for producers from becoming negative and a whey solids make allowance that is more reflective of national norms with regards to the cost of drying whey.

The current dry whey make allowance of \$0.267 per pound is substantially higher than the \$0.1976 per pound weighted average dry whey processing cost testified to by Dr. Mark Stephenson at a recent Federal Milk Marketing Order (FMMO) hearing. Dr. Stephenson is employed by the Cornell University's Program on Dairy Markets and Policy and submitted his processing cost study results at a FMMO hearing in Pittsburgh, PA on July 9, 2007. The study primarily reflected costs incurred by whey processing plants during calendar year 2006. A written copy of his testimony is attached. A prior cost study done by Dr. Stephenson had shown a dry whey manufacturing cost of \$0.1941 per pound. Based in part on that prior study, USDA established a dry whey make allowance of \$0.1956 per pound for the FMMO class III formula which went into effect on February 1, 2007. The current CDFA cost study, which shows a nearly \$0.31 per pound cost, is clearly extreme and not valid as a guide for setting a make allowance. Very little of the whey stream from California's cheese plants is processed into dry whey and therefore California cost studies for dry whey are skewed. A much larger portion of the whey stream is processed into the historically higher value Whey Protein Concentrate products for which standardized yields and costs are not known by the department or the general public.

A substantial part of the difference between the California class 4b price and federal order class III price can be attributed to this vast difference between the make allowance for dry whey in the two formulas. Our belief is that part of the reason CDFA adopted such a generous make allowance is to act as an incentive to expand cheese plant capacity in California.

No doubt, much will be said at this hearing about the need for expanded processing plant capacity in California. We reluctantly admit that some incentive to expand processing capacity is probably needed. But, minimum producer price reductions, applied across the board, are not an efficient way to incentivize new plant capacity.

### **Support for the CDI Proposal**

The Milk Producers Council board has discussed the California Dairies Inc. proposal to establish an incentive for new plant capacity in this state. CDI is proposing that a pool credit equal to \$0.50 per cwt. be granted to new and expanded plant capacity for the first three years of their operation. Milk Producers Council is willing to support this proposal in exchange for a continuance of a whey solids value in the 4b formula coupled with a reduced dry whey make allowance. In our view, this would constitute good public policy. **As a policy, make allowances should reflect normal costs, and incentives for new plant capacity should be targeted and transparent.**

In our view CDI has offered a way for the department to address the issue of plant capacity without significantly diminishing producer income. Other proposals which simply seek to slash producer income may work for a while, but when the inevitable collapse of butter, powder, cheese and dry whey prices occurs, the generous make allowances asked for today would come back to haunt producers in those dark days. While \$20 per cwt. milk will solve many problems for producers, we would be foolish to think that this situation will continue long-term. We must ensure that any plant capacity incentive be as efficient as possible. We urge the adoption of the CDI proposal.

### **Opposition to the Humbolt Proposal**

Producers should not be asked to subsidize small commodity butter, powder and cheese plants. Small plants were established because they found a market niche. The whey issue is separate and we have addressed that in our alternative proposal. Humbolt Creamery has been in business for decades and should be fully capable of recovering the costs of processing under the current make allowance policies. Their proposal for special treatment should be denied.

### **The Dairy Institute, Land O Lakes and CDI Make Allowance Proposals**

From time to time we understand that make allowances and price adjusters need to be modestly modified to keep up with the most current cost and pricing data. MPC does not object to modest, cost justified adjustments to these factors as long as they are consistent with the alternative proposal we made above.

### **The Milk Producers Council Class 4a Proposal.**

For the record, MPC reminds the department that our proposal to change the product value in the class 4a formula from the current California Weighted Average Price to the average of the Mostly Western Nonfat Dry Milk Price as reported in the Dairy Market News is still under consideration as part of the August 28, 2007 hearing for which there has been no finding as of today. MPC reiterates our support for that proposal for the reasons outlined in our testimony of August 28, 2007 and our post-hearing brief.

### **Conclusion**

This is the worst possible time for producers to be facing a hearing like this one. Milk prices are high and production is increasing. The cheesemakers are complaining and the temptation to stick it to producers is great. Producers were facing a similar situation in the early 1980's. Milk prices were high, production was increasing and plant capacity was an issue. But there are some differences now that must be recognized. The milk price run up in the early 1980's was stimulated and backed by the federal government's support price program. The industry was assured (foolishly) that the government would purchase all of the butter, powder and cheese offered to it at what turned out to be a very profitable price. Today, it is a strong export market for powder that is driving milk prices up. How long will that last? How wise is it to really gear up for a major expansion of milk production in California? Yes, today production is up. Milk Producers Council is supporting both some relief for specialty cheesemakers and CDI's plant capacity incentive, but these are moderate measures, not extreme measures. 25 years ago the cooperatives were not as strong as they are today. Now virtually all milk in California is under cooperative control. It is these cooperatives that either need to build the capacity or apply some long overdue discipline on their members. **The State of California can no longer take on the responsibility to find a California home for every gallon of milk any California producer wants to produce.** Moderate measures made in accordance with the law are what are called for as a result of this hearing. Milk Producers Council and our fellow producers have outlined such changes. Extreme changes, such as those proposed on behalf of some cheese plants today, which would result in significant differences between California and Federal Order price formulas, can not be legally or morally justified. We urge the Secretary to adopt our proposal.

# Testimony on Cost of Processing in Cheese, Whey, Butter and Nonfat Dry Milk Plants

presented at the

Federal Milk Marketing Order Hearing

Pittsburgh, PA  
July 9, 2007

by

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# Testimony on Cost of Processing in Cheese, Whey, Butter and Nonfat Dry Milk Plants

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## Introduction

Judge Palmer and personnel of AMS Dairy Programs, I am appearing before you to offer a summary of a recent research project in which I collected data on and summarized the costs of processing in cheese, whey, butter and nonfat dry milk plants. I am not here to advocate for or against any particular policy action but rather to offer my insights into the current cost environment for dairy processors. This is a summary of my work and does not represent an official statement of Cornell University.

Cornell University has been conducting cost of processing studies in the dairy industry for more than 30 years. Over the past 20 years, work by the Cornell Program on Dairy Markets and Policy group included studies on the cost of processing cheese<sup>1,2</sup>, whey<sup>3</sup>,

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<sup>1</sup> Mesa-Dishington, Jens K., Richard D. Aplin, and David M. Barbano., "Economic Performance of 11 Cheddar Cheese Manufacturing Plants in Northeast and North Central Regions, Part 1 of a Research Effort on Cheddar Cheese Manufacturing.", A.E. Res. 87-2, Dept. of Agr. Econ., Cornell Univ., January 1987.

<sup>2</sup> Mesa-Dishington, Jens K., David M. Barbano, and Richard D. Aplin., "Cheddar Cheese Manufacturing Costs, Economies of Size and Effects of Different Current Technologies, Part 2 of a Research Effort on Cheddar Cheese Manufacturing.", A.E.Res. 87-3, Dept. of Agr. Econ., Cornell Univ., January 1987.

<sup>3</sup> Hurst, Susan, Richard Aplin, and David Barbano., "Whey Powder and Whey Protein Concentrate Production Technology, Costs and Profitability, Part 4 of a Research Effort on Cheddar Cheese Manufacturing.", A.E.Res. 90-4, Dept. of Agr. Econ., Cornell Univ., April 1990.

butter, nonfat dry milk powder <sup>4,5,6,7</sup> and fluid milk <sup>8</sup>. This project assesses the costs of processing in cheddar cheese, dry whey, butter and nonfat dry milk plants and builds on knowledge and background of these earlier efforts. I was asked by dairy plants who had participated in the previous project <sup>6, 7</sup> to re-run the analyses with more recent data.

### Plant Selection

In previous project, participating plants were selected to on the basis of a random draw stratified by plant size. Because the time was short between the request to update the study and this hearing, The plants who were previously asked to participate were the only plants asked to participate again. This had strategy had multiple advantages. One advantage is that plants were already familiar with the process of data collection. It also allows an opportunity to examine changes in processing costs in same-plants from a previous time period.

There were 21 plants who responded with data and of those plants, 19 submissions were deemed to have data without problems and are included in this summary. The other 2 plants will correct their data and send it in but, too late for inclusion in this summary. Of the 19 plants, 11 processed cheese, 7 processed dry whey, 4 processed butter and 7 processed nonfat dry milk.

Plants were asked to submit data corresponding to their most recently completed fiscal year. This ranged from the last quarter of 2005 through the second quarter of 2007. The bulk of observations occurred during the calendar year of 2006. Figure 1 shows the temporal dispersion of the data in this report.

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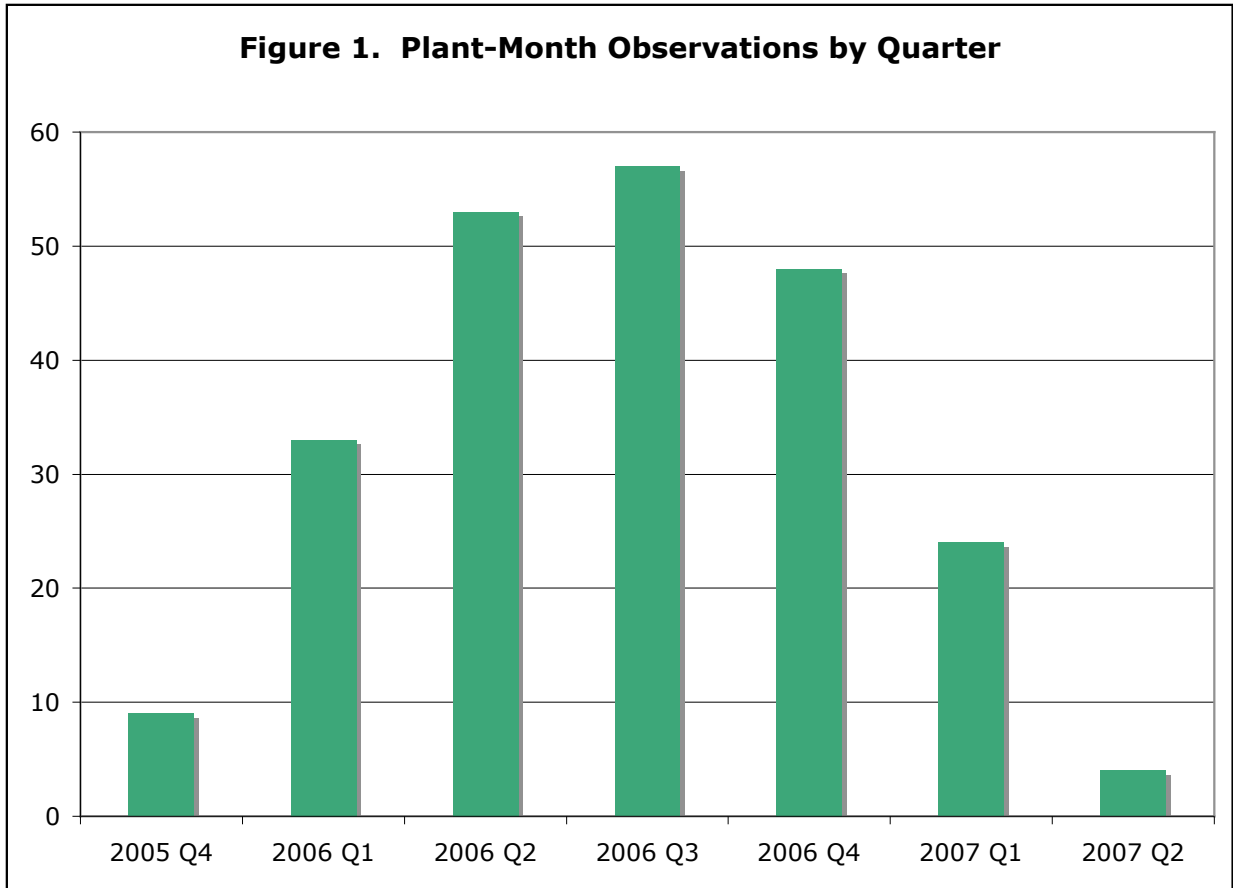
<sup>4</sup> Stephenson, Mark W. and Andrew M. Novakovic., "Manufacturing Costs in Ten Butter/Powder Processing Plants.", A.E.Res. 89-19, Dept. of Agr. Econ., Cornell Univ., September 1989.

<sup>5</sup> Stephenson, Mark W. and Andrew M. Novakovic., "Determination of Butter/Powder Plant Manufacturing Costs Utilizing an Economic Engineering Approach.", A.E.Res. 90-6, Dept. of Agr. Econ., Cornell Univ., June 1990.

<sup>6</sup> Stephenson, Mark W., "Cost of Processing in Cheese, Whey, Butter and Nonfat Dry Milk Plants, Working Paper, AEM, Cornell University, July 7, 2007.

<sup>7</sup> Stephenson, Mark W., "Testimony on Cost of Processing in Cheese, Whey, Butter and Nonfat Dry Milk Plants", Federal Milk Marketing Order Hearing, Strongsville, OH, September 14, 2006.

<sup>8</sup> Erba, Eric M., Richard D. Aplin, and Mark W. Stephenson., "Labor Productivities and Costs in 35 of the Best Fluid Milk Plants in the U.S.", E.B. 97-03, Dept. of Agr., Res., and Mgrl. Econ., Cornell Univ., March 1997.



Data Collection

The previous project detailed the data collection and summary methods. It may be instructive to remind folks that data collection used a computer program developed to build a questionnaire based on responses to previous questions. For example, first identifying products produced at the plant generated subsequent questions about package sizes and monthly production of the individual products. And, identifying package sizes then generated questions about the packaging costs for those particular containers, etc. When surveys are complete, they are submitted as an email attachment or directly from within the program.

Methodology for collection and summary of the data closely follows the industry-accepted practices of the California Department of Food and Agriculture (CDFA). Anywhere plant expenses can be directly allocated to particular products, plants are asked to do so. A good example is utility expense where individual electric or gas meters can be recorded and assigned to a product line such as cheese or powdered products. Some expenses must be indirectly allocated to products.

*As per CDFA's procedure, Any cost that cannot be clearly assigned to a single product line is apportioned according to the percent of milk solids processed in the various product lines.* For example, a plant that brought in 100 pounds of raw milk and proc-

essed it into cheese, dry whey and whey cream might have sold 5.85 lbs of solids (fat and solids-not-fat) in the cheese, 6.12 lbs of solids in the dry whey and 0.20 lbs of solids in the whey cream. This would mean that \$10,000 of unallocated electricity would be apportioned as \$4,807 to cheese, \$5,029 to dry whey and \$164 to whey cream. Any other costs which are unallocated to specific product lines are apportioned indirectly in the same way as the electric cost example.

Direct allocation is of course best. But, the allocation by solids is generally a workable compromise where the detail is not available. In a butter-powder plant that sells only butter and nonfat dry milk, it is possible that indirectly allocated costs may be too heavily assigned to one of the products. However, all of the expenses of the plant are accounted for in the butter and nonfat dry milk cost estimates.

A more serious problem with indirect allocation can exist when products that are not reported in the study have received an inappropriate weighting of an expense. This occurred in the previous study but was caught between the publication of the working paper and the testimony that I gave. I opined at the testimony that the allocation change appeared to be unique to a single butter-powder plant.

Plants that sell a significant portion of total solids as intermediate products can fall into this allocation problem. For example, a butter-powder plant that sells a large amount of cream or skim milk, or even condensed product, can overstate the indirectly allocated expenses for those products and thus underestimate the true costs of producing butter or powder. Upon examination, more than the single plant from the previous testimony had this problem to a lesser, but significant degree. The attempt has been made to correct the problem this time in the summary. Ultimately, directly allocating expenses on the part of plants eliminates this problem.

### Processing Cost Results

Although there were a reasonable number of plants participating in this data collection, I will not list them as groupings of “Low” and “High” cost plants to assure confidentiality of individual plant data. I am reporting the weighted average costs by categories which correspond to CDFAs reports on manufacturing costs.

Table 1. shows the weighted average processing costs for the 11 cheese plants participating in the project and Figure 2. shows the breakdown of the costs.

Table 1. Processing Costs for 11 Cheddar Cheese Plants.

	Pounds Cheese	Labor	Energy	Ingredients	Packaging	Repairs & Depreciation	G&A	ROI	Total
Weighted Average	118,711,332	\$0.0400	\$0.0165	\$0.0251	\$0.0238	\$0.0334	\$0.0076	\$0.0119	\$0.1584
Last time Wt Ave.	60,223,592	\$0.0435	\$0.0174	\$0.0147	\$0.0198	\$0.0446	\$0.0126	\$0.0112	\$0.1638

Figure 2. Breakdown of Cheddar Cheese Processing Costs.

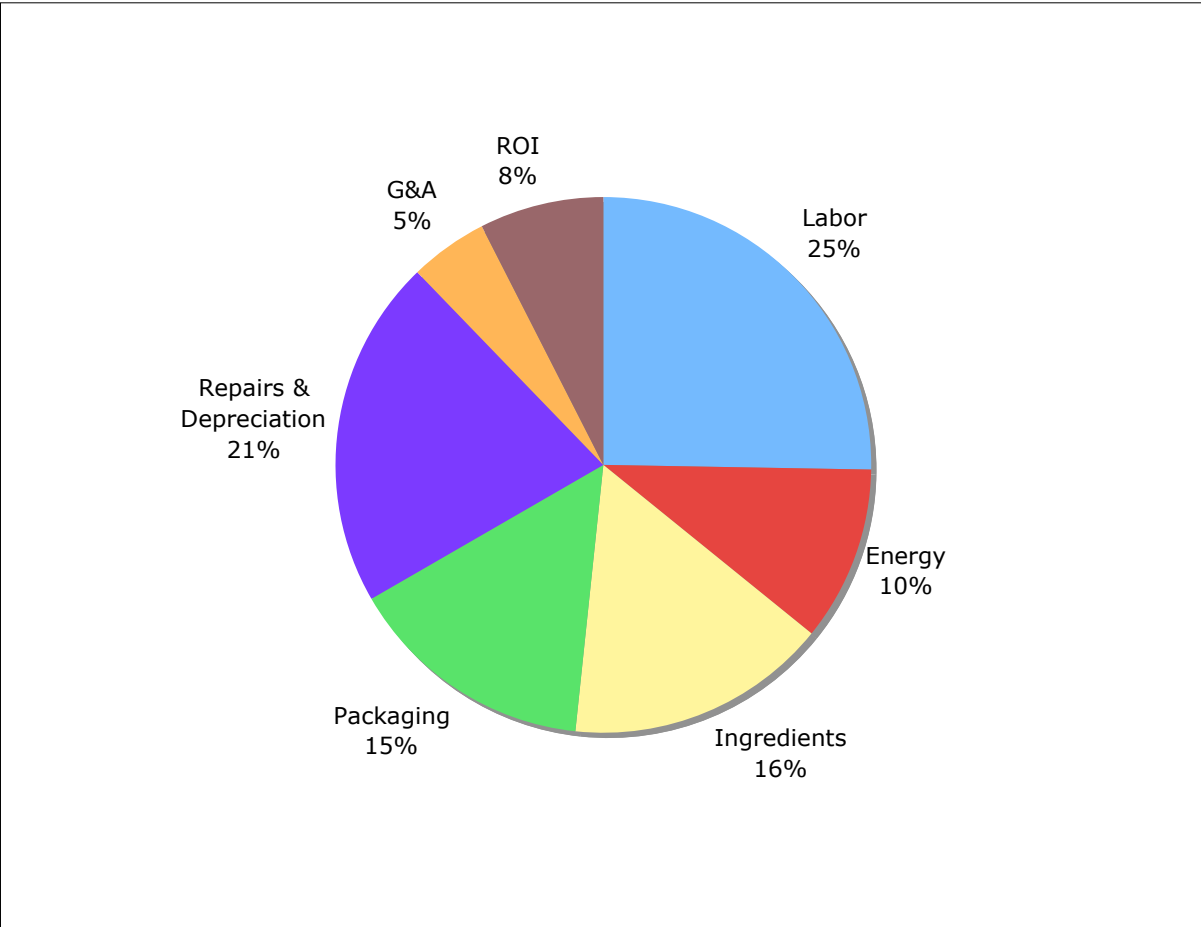


Table 1. also shows the weighted average costs from the project offered in the previous testimony. It may be noted that the total processing costs reported actually declined from the previous summary. However, it should also be noted that there are 3 large plants that are included in the current summary that were not included in the last report because their data was submitted too late for inclusion. Please note that the average annual pounds of cheese processed nearly doubled from the previous report. There are 8 plants which participated in both projects and allow a plant-by-plant comparison of the costs from the previous report and this one. Comparing same plants shows that processing costs have actually increased 1.7¢ per pound since the last study.

Table 2. shows the weighted average processing costs for the 7 dry whey plants participating in the project and Figure 3. shows the breakdown of those costs.

Table 2. Processing Costs for 7 Dry Whey Plants.

	Pounds Whey	Labor	Energy	Packaging	Repairs & Depreciation	G&A	ROI	Total
Weighted Ave	58,722,459	\$0.0412	\$0.0424	\$0.0146	\$0.0580	\$0.0203	\$0.0211	\$0.1976
Last time Wt Ave.	47,394,657	\$0.0416	\$0.0347	\$0.0108	\$0.0593	\$0.0262	\$0.0216	\$0.1941

Figure 3. Breakdown of Dry Whey Processing Costs.

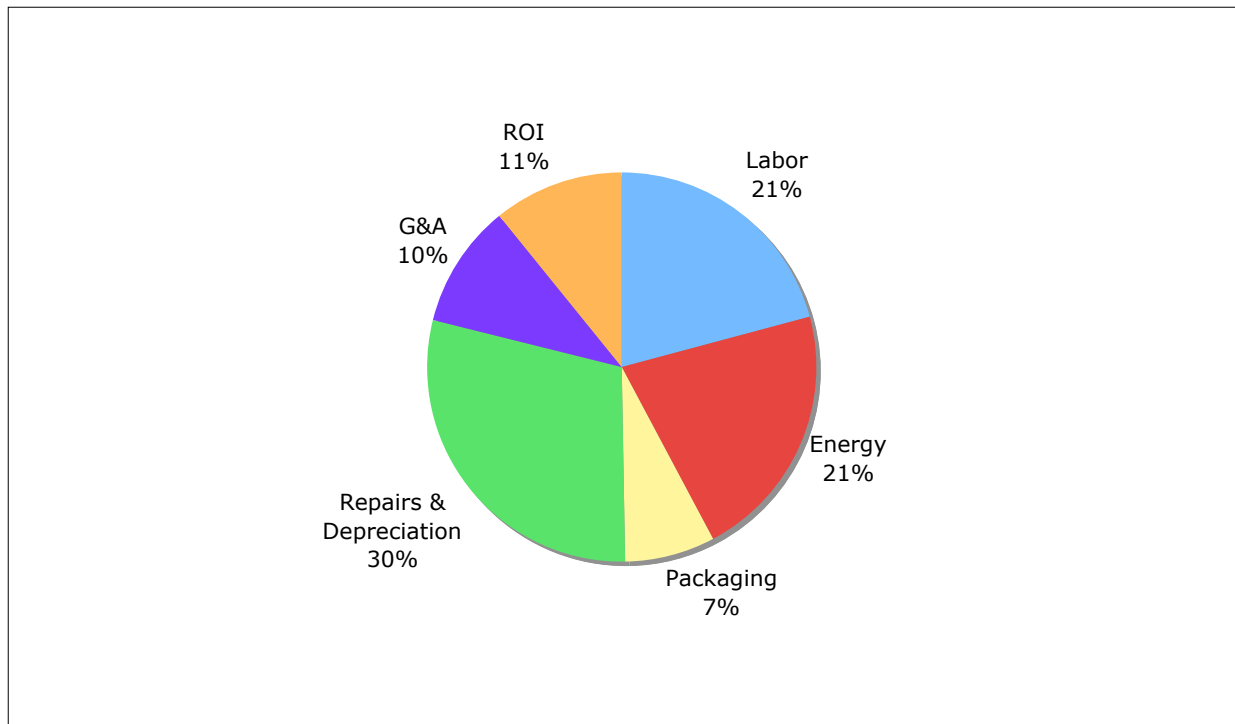


Table 2. highlights that dry whey processing costs have only modestly changed since the last report. Although the average annual pounds of whey processed is larger, and there are increases in energy and packaging costs, they are somewhat offset by smaller expenses for repairs, depreciation, general and administrative and return on investment. The total costs have increased by less than half a cent per pound. The same thing is shown by same-plant comparisons.

Table 3. shows the weighted average processing costs for the 4 butter plants participating in the project and Figure 4. shows the breakdown of the costs.

Table 3. Processing Costs for 4 Butter Plants.

	Pounds Butter	Labor	Energy	Ingredients	Packaging	Repairs & Depreciation	G&A	ROI	Total
Weighted Average	57,626,803	\$0.0522	\$0.0157	\$0.0029	\$0.0189	\$0.0662	\$0.0204	\$0.0083	\$0.1846
Last time Wt Ave.	31,400,511	\$0.0281	\$0.0114		\$0.0104	\$0.0541	\$0.0064	\$0.0108	\$0.1108

Figure 4. Breakdown of Butter Processing Costs.

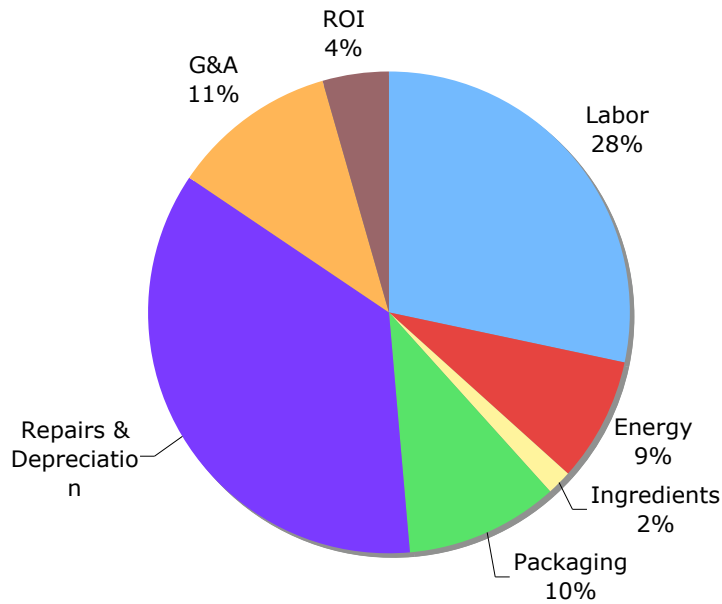


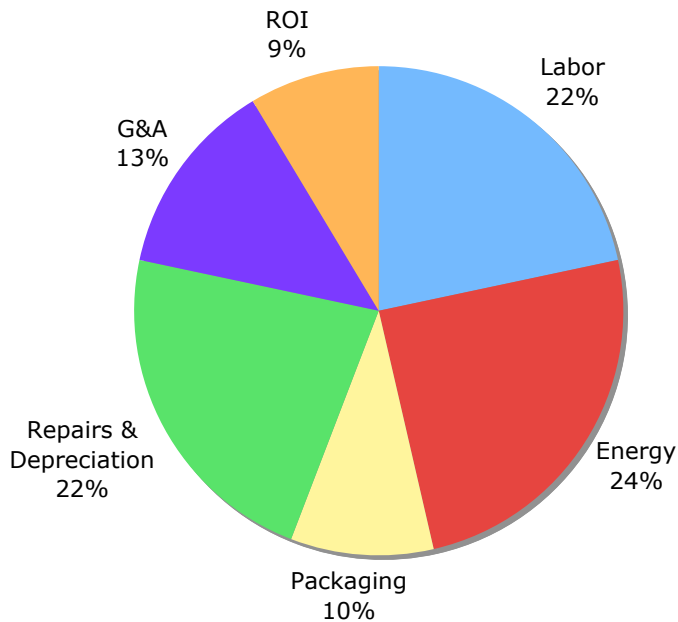
Table 3. would indicate that butter plants have seen a substantial increase in overall costs of processing—up a little more than 7¢ per pound while average volume of the plants had nearly doubled. In my testimony on plant processing costs on September 14, 2006, I had stated that “The confidence interval for ... butter a range from -\$0.0921 to \$0.3905. The large range on butter costs reflects relatively few observations and a fair amount of variability in the data.” Although the increase looks large, I have much more confidence in the data this time.

Table 4. shows the weighted average processing costs for the 7 powder plants participating in the project and Figure 5. shows the breakdown of the costs.

Table 4. Processing Costs for 7 Nonfat Dry Milk Plants.

	Pounds Powder	Labor	Energy	Packaging	Repairs & Depreciation	G&A	ROI	Total
Weighted Average	70,142,458	\$0.0362	\$0.0409	\$0.0159	\$0.0372	\$0.0217	\$0.0143	\$0.1662
Last time Wt Ave.	55,066,936	\$0.0339	\$0.0315	\$0.0143	\$0.0359	\$0.0196	\$0.0072	\$0.1423

Figure 5. Breakdown of Nonfat Dry Milk Processing Costs.



All of the same nonfat dry milk plants participated in this and the previous study. However, Table 4. shows that these plants on average processed considerably more product than in the previous time period. The plants are also showing a significant increase in the weighted average cost of processing—somewhat more than 2¢ per pound. This is due in part to real increases in some costs (labor, packaging, repairs and depreciation are good examples) and in part to the changes in the methodology of indirectly allocating costs. Energy is a particularly good example of using a better indirect allocation of costs in plants with significant sales of bulk liquid products.

## Summary

In the previous study, the bulk of plant-month observations came during the 12 month time period of July 2004 through June 2005. This time, calendar year 2006 was where I had the majority of the observations. Over that year-and-a-half, plants have continued to observe increased costs of processing. These are most pronounced in the same-plant comparisons for cheese, butter and nonfat dry milk and less so for whey processing.

Energy was the most common cost center increase in all products. Labor also accounted for significant increases in costs across all products. And, for most products, increases in packaging costs were notable.

It is particularly true in nonfat dry milk plants that the indirect allocation method using pounds of solids sold can miss-apportion costs between products. In the last testimony, this has had the effect of understating the costs of processing nonfat dry milk. An attempt has been made to correct this problem in the summary of the data. And, a procedure will be implemented to correct the problem at the point of data collection in the future.

If you have any questions, I would be glad to try and answer them without divulging any confidential data.