My name is Venetta Reed, I am the Supervising Auditor of the Manufacturing Cost Unit for the Dairy Marketing Branch at the California Department of Food and Agriculture. I have worked in dairy cost accounting for 20 years.

The Department has been responsible for collecting and publishing manufacturing costs on butter, nonfat dry milk powder, and cheese, for over 35 years. Due to changing trends in the dairy industry, the department started skim whey powder cost collection in the 2003 cost study period.

The criteria for product cost are; for cheese 40 blocks, and 500 pound barrels, butter, 25kg and 68 pound blocks, nonfat dry milk powder 25kg and 50 pound bags, and skim whey powder 25kg bags.

The Department categorizes cost in the following line items:

- Processing Labor
- Processing Non-Labor, which include cost such as utilities, repairs and maintenance, supplies, depreciation and rent.
- Packaging
- Other Ingredients
- General & Administrative
- Return on Investment

The published costs are complied from manufacturing plants on a voluntary basis. (These are not mandatory audits.) The 2004 cost study period represented 99.9% of butter production, 98.5% of Cheddar and Monterey Jack Cheese production, 99.17% of Nonfat Dry Milk Powder production, and 79% of Skim Whey Powder production in California for the year of 2004. Information is gathered annually from manufacturing plants to cover the prior 12 month period. The areas covered in the cost study are:

**Receipts and Usage**

- Receipt of all raw milk and other dairy products into the plant from all sources which is used in the manufacturing process. Receipts of milk products include the total pounds, butterfat pounds, and solids-not-fat pounds.

  The usage section is an account of all products processed from the received milk for the period covered.

  The records used are the monthly Milk Pooling Branch 800 report, or the companies work papers used to compile the 800 report. For finished product information, we use the plants production records.
Payroll

- Labor is a major factor of processing costs. Therefore, the auditor must ensure that all labor costs are included in the study. This will include the "confidential" payroll and bonuses of the executive staff. Total gross wages must be picked up for each employee including vacation, holiday, sick, jury duty, etc. to reflect the entire cost study period. Payroll taxes and fringe benefits, such as pensions, health and life insurance, are computed on the basis of the most current rates available at the time the field work is conducted. The expenses recorded in the company's general ledger for fringe benefits and payroll taxes are adjusted out and replaced by the more current computed amounts. The most current rate and experience factor for worker's compensation insurance is used, unless the company is self-insured. For a self-insured company the expense found in the trial balance is allocated based on the number of employees in each payroll category.

Functional Analysis

- A tour of the plant is made prior to compiling the functional analysis. During the plant tour various operations are noted, including the different types of machinery, their production capabilities, number of staff required to run each machine and the number of days and hours in which they operate. To determine and distribute each employee's percentage of time, a list of each employee for the period of the study is forwarded to the Plant Manager or one of the direct supervisors to distribute the employees' percentage of time spent in each department.

Depreciation

- It is the policy of the Dairy Marketing Branch that all cost studies should use the straight line method for computing depreciation expenses. The policy requires the use of the acquisition date and the original cost of the asset with no salvage value. However, for the 2005 year studies a salvage value of 10% of the original cost will be retained. The records received are a complete listing of the plants assets.

Return on Investment

- The return on investment allowance represents how much interest income the company could earn if their capital was not tied up in land, buildings and equipment. All long-term interest expense is adjusted out of the company's books. The return on investment allowance replaces long-term interest; however, short-term interest remains on the company's books as an interest expense.
- A remaining book value figure for each asset is calculated by subtracting accumulated depreciation from the original cost of the asset. The remaining book value is then multiplied by a weighted annual Moody's BAA Bond Index rate to arrive at a return on investment allowance.
General Ledger

- The general ledger section of the cost study includes all of the expenses incurred by the handler during the cost study period. It is composed of an audited trial balance, a schedule of adjustments, and analysis of those accounts determined by the auditor for special consideration. A report of general ledger accounts and amounts for the study period are forwarded to the auditor usually by the CFO or the Senior Accountant. Utility invoices are also part of the record collection for the general ledger.

Raw Product

- The raw product component is included in the cost study, but is not a part of the total processing costs except for non-dairy ingredients.
- The milk portion of the raw product cost is computed using the component pricing for Butterfat and Solids not Fat on an average for the year published by Dairy Marketing Branch.

Packaging

- Packaging expenses are set up in the cost study as a separate component cost for each product, broken down by individual sizes. Thus, packaging supplies expense is eliminated from the general ledger. Packaging costs are determined based on the latest available invoice price plus freight less discounts, if any. Total costs include all non-reusable items used in the packaging of the product, such as boxes, bags, cartons, liners, tape, glue and stretch wrap.

Compiled Summary Pages

Processing Labor

- The processing labor section allocates to finished products the total wages, payroll taxes and fringe benefits of all plant employees. These labor costs are brought forward from the Payroll and Functional Analysis sections to the “Labor Distribution” schedule.

Processing Non-Labor

- Processing non-labor costs include all direct and indirect plant expenses except those pertaining to payroll cost. The analyses of these expenses are contained in the general ledger, but the final expense allocation to the various products is usually completed in the processing non-labor section.

General and Administrative Costs
- General and Administrative costs include all the expenses incurred in the direction, control and management of the company. Included in those expenses are all payroll costs associated with the administration of the business, such as office clerical wages and executive salaries. Examples of other G&A expenses are office supplies, short-term interest, dues and subscriptions, accounting fees and headquarter charges.

- The final schedule in the cost study is called the summary of unit cost. It combines all the various costs from other sections of the study into final unit cost figures for each dairy product.