## Testimony of John Jennings, Plant Manager Great Lakes Cheese of NY, Inc. April 2007 Federal Milk Order Hearing Docket No AO-14-A77, et al; DA-07-02

My name is John Jennings. I am the plant manager for the Great Lakes Cheese of NY, Inc. dairy manufacturing plant located at 23 Phelps Street in Adams, New York. The facility is owned and operated by Great Lakes Cheese Company Inc., headquartered in Hiram, Ohio. I have been serving as the plant manager of the Adams facility for the past fourteen years. I am responsible for the overall operations of the facility and I report directly to the Vice President of Manufacturing. I am directly involved in the entire process from purchasing of the raw materials to sales of the products. Prior to becoming plant manager, I held a variety of production and supervisory positions in the Adams plant. I have worked at the plant for 31 years, starting in 1976 when it was owned and operated by Dairylea Cooperative; Great Lakes purchased the plant from Dairylea in 1985.

The Adams facility converts whole milk into American style natural cheese (primarily cheddar). Along with the cheese products, whole sweet whey powder and whey cream are also produced as byproducts of the operation. The plant currently processes approximately 410 million pounds of milk annually. This equates to 41 million pounds of American style natural cheese, 23 million pounds of whole sweet whey powder and approximately 1 million pounds of whey cream fat annually. All of these products are sold in bulk form used for further processing or as an ingredient.

My focus today is to provide information about the cheddar manufacturing and the byproducts generated that might be helpful to USDA to make a sound decision from this hearing. I am not a dairy economist and do not consider myself to have specialized expertise in the regulated milk pricing system. However, I have been told a couple things about the current Class III formulas that concern me. Specifically, I have been told that the existing formula assumes that no milk components are lost in the manufacturing process, and that all of the fat received at the plant that is not captured in the cheddar cheese has a value equal to the value of fat in grade AA butter. I disagree with both of these assumptions and will elaborate further on these issues.

## In-plant Losses

For the sustainability of processors, it is imperative that the products accounted for in the regulated milk pricing system not exceed what can be produced from the milk being priced. There are inherent component losses throughout the manufacturing process. These component losses may come in the form of but not limited to milk, cheese, whey solids and whey cream. Two significant contributors to component losses are the cleaning and sanitizing of equipment and the desludging of the whey separator equipment.

Typically, cheese operations will run for up to twenty hours of process and will be down for approximately four hours to clean and sanitize. The start-up and shutdown process

and the cleaning process lead to component losses. At the front end of the process, milk is lost at pasteurizer start-up and shutdown. At start-up, the milk has to push water through the system and the milk / water mixture is run onto the floor and disposed of as waste material until it reaches approximately 90% milk concentration. At shutdown, the opposite occurs and water is used to chase the milk. Once the water dilutes the milk below 90% milk concentration, the balance of the milk / water mixture is run onto the floor and disposed of as waste material. We have not quantified the volume of these losses but they do exist throughout the industry.

Milk components that are clinging to the insides of the equipment are also lost (that is, disposed of as waste material) during the cleaning and sanitation cycle. Fat is the most significant component that clings to the stainless and is lost during the daily CIP (clean in place) cycle through the piping and equipment. However, whey solids also build up on the inside of the whey dryer and are lost when that equipment is cleaned every couple weeks. We have not quantified the volume of these losses.

An area of loss that we have quantified is the whey solids lost in the whey separation process, resulting from the desludging of the whey separators. After the whey is removed from the cheese vat, it is separated to recover as much of the whey fat as possible. This is because fat in whey cream has a higher value that fat in dry whey products. All of the whey generated is run through a separation process where the fat is removed by means of a centrifuge type machine. This is a continuous process and during the operation the machine will desludge on a timed sequence.

Desludging is basically back washing the machine or flushing out the residual solids that build up in the machine during the separation process. The industry standard is to typically run a full desludge every hour and a partial desludge every fifteen minutes. During the full desludge, approximately twenty gallons of product is discharged from the machine and during a partial only about five gallons of product is discharged. Our operation runs approximately nineteen and a half hours per day, which equates to three hundred ninety gallons of product during the full desludge and two hundred and ninety gallons of product on the partial desludge. The whey solids level for the full desludge are 3% and for the partial desludge are 4%. When you convert the gallons to pounds and calculate the dry pounds of solids lost for both the full and partial desludging, it equates to approximately 200 pounds of dry whey solids per day. The facility operates at full capacity for at least 355 days per year. The total whey solids lost annually is 71,000 pounds. That 71,000 pounds represents 0.3% of our incoming raw milk "other solids" purchased last year. Using the average of the whey mostly central market for 2006 of \$.3348 / lb., the value of the solids lost would be \$23,770. This information was compiled by measuring the desludge volumes and in plant testing of the product discharged. The market value is the average value for 2006 "Central States whey mostly" reported in the USDA/AMS Dairy Market News.

## Whey Cream Market Value

The second focus point of my testimony is the market value of whey cream fat and the limited marketing options available for whey cream fat. The Adams facility produces

approximately one million pounds of whey cream fat annually. Potential outlets for this product are very limited not only in the Eastern region but for the entire country as well. To my knowledge, there are only two processors purchasing whey cream in the East. Currently Great Lakes Cheese of NY, Inc. is selling whey cream to a processor in Massachusetts and it is sold FOB the Adams plant. The value that Great Lakes Cheese of NY, Inc. has received for the product basically has been at the AA butter market price. During our 2006 fiscal year, Great Lakes Cheese of NY, Inc. received an average price of \$1.2413 / pound of fat for the whey cream fat sold. The average CME AA butter price weighted by the loads sold each week was \$1.2393. So our average multiplier over the course of the year was 100.16% of the CME grade AA butter market. Copies of actual invoices will be submitted for the record at the hearing.

Table 1 (attached to my testimony) provides a summary of cream sales by month with average invoice prices and billed amounts. Additionally, it shows the average Class III fat price for each month and the revenue shortfall from that minimum fat price. Table 1 shows that, although we received an average price of \$1.2413 on the fat pounds in the whey cream sold during 2006, the average Class III minimum regulated fat price was \$1.3238 per pound on the fat that was sold. So we received 8.25 cents less per pound fat than we were charged under the regulated price system. I am informed that the Class III price formula was modified slightly in February of this year and now determines the value per pound of butterfat by subtracting 12.02 cents from the Grade AA butter price and multiplying that amount by 1.2. Based on that formula, the average value ascribed to the fat in the Class III price that we sold as whey cream in the January through December 2006 timeframe was slightly lower at \$1.3175. But given that we in fact only received \$1.2413 per pound of fat in the whey cream, we still would have incurred a loss on the fat component of the whey cream of 7.63 cents per pound fat. This 7.63 cent loss does not consider the loss on the protein and other solids that are carried in the skim portion of the whey cream. We are only paid on the fat component of the whey cream and do not get paid for the components that are carried in the skim.

Great Lakes Cheese Company Inc. also owns and operates Empire Cheese, another dairy processing plant located in Cuba, New York. That facility produces Italian cheeses and also generates whey cream on a daily basis. Due to the fact that the product from this facility doesn't meet the requirements of the whey cream processors in the East, all of the whey cream is shipped and sold in the mid west. In this scenario, Empire Cheese is responsible for the freight costs to locations in either Wisconsin or Nebraska. In this case, the value that Empire receives for the whey cream coupled with the freight costs result in a significantly lower return than is achieved at the Adams plant.

Table 1: Summary of Great Lakes of New York Cream Sales vs. Class III Regulated Fat Costs: FY06

Class III Fat Price (Actual) Per # fat Price (Actual) Per # fat Price (Actual) Per # fat Price (\$0,1060) \$1,24684 \$1,2596 \$1,2596 \$1,2343 \$1,2582 \$1,2436 \$1,2582 \$1,2436 \$1,2582 \$1,2436 \$1,2582 \$1,0771) \$6,798) \$1,2436 \$1,2582 \$1,0775) \$6,786) \$1,2436 \$1,2582 \$1,0775) \$6,786) \$1,2436 \$1,2436 \$1,0208 \$1,2436 \$1,2436 \$1,2436 \$1,0208 \$1,2436 \$1,2436 \$1,0208 \$1,2436 \$1,0208 \$1,4191 \$1,003 \$1,003 \$1	\$1.3238 (\$0.0825) (\$82,278)	3 \$1,238,138	\$1.2413	997,461	2,207,540	
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) 777 \$1.4684 \$1.4684 \$1.4689 \$1.3469 \$1.3469 \$1.3469 \$1.3469 \$1.2596 \$1.2596 \$1.2343 \$(\$0.0850) \$1.2596 \$1.2243 \$(\$0.0831) \$1.2582 \$1.2238 \$1.2228 \$1.2228 \$1.2228 \$1.2228 \$1.2228 \$1.2008 \$1.2238 \$1.2333 \$1.2333 \$1.3008 \$1.3008 \$1.3008 \$1.3008 \$1.3008 \$1.4191 \$1.000771 \$1.4087 \$1.4087	(\$0.0883)	8 \$104,830	\$1.2598	83,212	175,286	Dec-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) 777 \$1.4684 \$1.3469 \$1.3469 \$1.3469 \$1.2596 \$1.2596 \$1.2596 \$1.2596 \$1.2343 \$209 \$1.2582 \$1.2343 \$20,0831) \$1.2582 \$1.2436 \$1.2	(\$0.0889)		\$1.2963	87,434	191,939	Nov-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) 777 \$1.4684 \$1.3469 \$1.3469 \$1.3469 \$1.2596 \$1.2596 \$1.2596 \$1.2343 \$209 \$1.2582 \$1.2582 \$20 0771) \$1.268 \$1.2436 \$1.2436 \$20 0775) \$20 \$1.228 \$31.228 \$31.208 \$31.228 \$31.208 \$31.228 \$31.208 \$31.228 \$31.208 \$31.228 \$31.208	(\$0.0812)		\$1.333	88,921	195,279	Oct-06
Class III Class III Class III Fat price (Actual) Per # fat price (Actual) Per # fat price (Actual) Per # fat per month (Feb 07)  77 \$1.4684 (\$0.1060) (\$7,708) \$1.4622  949 \$1.3469 (\$0.1311) (\$9,713) \$1.3406  \$1.2596 (\$0.0958) (\$7,464) \$1.2534  209 \$1.2343 (\$0.0850) (\$6,007) \$1.2281  256 \$1.2582 (\$0.0831) (\$7,092) \$1.2281  256 \$1.2582 (\$0.0771) (\$6,766) \$1.2373  391 \$1.2228 (\$0.0725) (\$6,867) \$1.2166  \$1.3008 (\$0.0208) (\$1,905) \$1.2946	\$1.4191 (\$0.0771)		\$1.3420	82,979	172,389	Sep-06
Class III Class III Class III Fat price (Actual) Per # fat per month (Feb 07)  77 \$1.4684 (\$0.1060) (\$7,708) \$1.4622  949 \$1.3469 (\$0.1311) (\$9,713) \$1.3406  708 \$1.2596 (\$0.0958) (\$7,464) \$1.2534  209 \$1.2343 (\$0.0850) (\$6,007) \$1.2281  256 \$1.2582 (\$0.0831) (\$7,092) \$1.2373  391 \$1.2228 (\$0.0725) (\$6,867) \$1.2373	\$1,3008 (\$0,0208)		\$1.280	91,539	199,922	Aug-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) Per # fat Price (Actual)  77 \$1.4684 (\$0.1060) (\$7,708) \$1.4622  949 \$1.3469 (\$0.1311) (\$9,713) \$1.3406  951.2596 (\$0.0958) (\$7,464) \$1.2534  969 \$1.2343 (\$0.0850) (\$6,007) \$1.2281  954 \$1.2436 (\$0.0771) (\$6,786) \$1.2373	\$1.2228 (\$0.0725)		\$1.150	94,667	209,846	Jul-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) Per # fat Per month Revenue less Class III fat price (Actual) Per # fat Per month Revenue less Class III fat price (Feb 07)  \$1.4684 (\$0.1060) (\$7,708) \$1.4622  \$1.3469 (\$0.1311) (\$9,713) \$1.3406  \$1.2596 (\$0.0850) (\$7,464) \$1.2534  \$1.2343 (\$0.0850) (\$6,007) \$1.2281  \$56 \$1.2582 (\$0.0831) (\$7,092) \$1.2520	\$1.2436 (\$0.0771)		\$1.166	88,003	201,780	Jun-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) Per # fat Price (Actual)  777 \$1.4684 \$1.3469 \$1.3469 \$1.3469 \$1.2596 \$1.2596 \$1.2596 \$1.2343 \$20.0850 \$1.2343	\$1.2582 (\$0.0831)		\$1.175	85,319	197,734	May-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) Per # fat per month (Feb 07)  \$1.4684 (\$0.1060) (\$7,708) \$1.4622  \$1.3469 (\$0.1311) (\$9,713) \$1.3406  \$1.2596 (\$0.0958) (\$7,484) \$1.2534	<b>\$1.2343</b> (\$0.0850)		\$1,1493	70,660	159,655	Apr-06
Class III Fat Price (Actual) Revenue less Class III fat price (Actual) Per # fat per month (Feb 07)  \$1.4684 (\$0.1060) (\$7,708) \$1.4622  \$1.3469 (\$0.1311) (\$9,713) \$1.3406	\$ (\$0.0958)		\$1.163	77,938	176,225	Mar-06
Class III Class III Class III Fat Price (Actual) Per # fat per month (Feb 07)  \$1.4684 (\$0.1060) (\$7,708) \$1.4622	(\$0.1311)		\$1,2158	74,068	163,795	Feb-06
Class III  Fat Price Revenue less Class III fat price Fat Price (Actual)  per # fat per month (Feb 07)	(\$0.1060)		\$1,362	72,722	163,690	Jan-06
Class III Class III Fat Price Revenue less Class III fat price Fat Price	per#fat		Shipped			No. of the contract of the con
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••••	At actual announced Class III fat	Total	Invoice Price per	Fotal	Total	
Fat Revenue Shortfall from	Fat Revenue Shortfall		Average		! - ,	