

Whey Review Committee
Request from February 4, 2008 meeting
Item #16
Whey Value Ideas and Concepts from CDFA Hearing Records
Version #2

The original whey factor was first included in the Class 4b pricing formula April 2003 and removed from the Class 4b pricing formula at the end of November 2007. The original whey factor took the following form:

(Commodity price of dry whey – make allowance) x yield factor

Effective December 2007, the original whey factor in the Class 4b pricing formula was replaced by a fixed whey value that is a fixed numeric value of \$0.25.

Per the request of the Whey Committee, the Department first reviewed the CDFA hearing record from the late 1990s (1998) to the present and documented each idea or concept related to valuing whey that significantly differs from the original concept. Following a second request from the Whey Committee, the Department subsequently reviewed the CDFA hearing record back to 1990 to document any proposed concepts and ideas that were different than the original whey factor, sorted by the hearing in which the proposal was made and the organization that proposed it in parenthesis. The following contains all ideas from the CDFA hearing record from 1990-present.

September 3, 1997 Hearing

- Shared whey factor: This idea is similar to the previous whey factor, but it takes a slightly different form. (Milk Producers Council)
 - The proposed whey factor takes the form:

(Whey price x Yield) x 0.4
 - This proposed whey factor is different from the previous whey factor in that it omits a manufacturing cost allowance. Additionally, the factor is multiplied by a factor of 0.4 so that the only a portion of the whey value is added to the milk price. This allows a sharing concept where producers receive some value (40%) of the value of the whey component and processors only pay 40%, which allows processors a margin to market their finished whey product. In essence, producers receive a value from whey in the milk price while processors are not forced to pay the full value of this whey factor.
- Shared whey factor: This idea is similar to the above mentioned idea. (California Dairy Campaign)
 - The proposed whey factor takes the form:

(Whey price x Yield) x 0.5
 - This proposed whey factor is similar to the above mentioned idea but uses a factor of 0.5.

Protein Pricing

September 3, 1997 Hearing

- Replace the Solids-not-fat (SNF) component price with a Protein Price and an Other-Solids price: This idea of component pricing includes both a protein value and an other-solids value in order to calculate the value of all the solids in milk that are not fat. (California Gold Dairy Products Association)
 - The proposed solids other than fat components take the form:

$$\text{Protein Price} = (\text{Cheddar cheese price} \times \text{Protein yield})$$

$$\text{Other-Solids Price} = [(4b \text{ fat price} \times \text{milkfat test}) - (\text{weighted average } 4b \text{ snf price} \times \text{SNF test})] - [(4a \text{ fat price} \times \text{milkfat test}) - (\text{protein price} \times \text{protein test})] / (\text{snf test} - \text{protein test})$$
 - This proposed solids other than fat component pricing causes the milk price to include component prices for fat, protein, and other solids not fat. However, this concept does not explicitly include a whey commodity price or the value of whey protein. This protein pricing seems to be pricing just the protein in the milk that would be captured in cheese during the cheese making process.

January 29, 2003 Hearing

- Solids-not-fat (SNF) component price including protein pricing: This idea of component pricing includes both a protein value and a whey value in order to calculate the SNF portion of the formula, which is similar to the Federal Class III (cheese milk) formula. (Alliance of Western Milk Producers)
 - The proposed SNF component takes the form:

$$\text{The Class 4b SNF} = [(3.1 \times \text{Protein Value}) + (5.9 \times \text{Whey Solids Value})] / 9$$

$$\text{Protein Value} = [(\text{Cheese price} - \text{fob adjuster} - \text{make allowance}) \times \text{Protein-based yield}] + \{[(\text{Cheese price} - \text{fob adjuster} - \text{make allowance}) \times \text{Fat-based yield}] - (\text{Butterfat price} \times \text{Fat retention percentage})\} \times \text{Fat-protein ratio}$$

$$\text{Whey Solids Value} = (\text{Whey price} - \text{make allowance}) \times \text{yield}$$
 - This proposed SNF component calculates a value for the protein of the milk captured in cheese (Protein value) and the value of the protein left over in the whey (Whey solids value) and then combines the two values into one SNF value.

February 1, 2005 Hearing

- Plants covered: Set a make allowance that will cover the costs of 80% of plants making whey. (Land O' Lakes)
- Snubbers: When the whey commodity price decreases below the make allowance in the previous whey factor, the whey factor actually adds a negative value to the milk price or decreases the milk price. A

snubber would keep the whey factor value from going below zero so that it never decreases the milk price. (Various Producer Organizations)

June 1, 2006 Hearing

- Combination of Commodity Prices: Use both dry whey and whey protein concentrate 34 to serve as the commodity used in the previous whey factor. (Milk Producers Council)
 - The whey commodity price to be used in whey factor is calculated as 1/2 of the monthly dry whey price added to 1/2 of the whey protein concentrate 34 price.
- Variable make allowance: Implement a variable whey make allowance that ‘shares’ the pains and the gains caused by fluctuations in the whey commodity price. (Land O’ Lakes).
 - The whey factor takes the form:
$$(\text{Whey price} - [\text{make allowance} + \{1/2 (\text{whey price} - \text{make allowance})\}]) \times \text{yield}$$
 - When the whey commodity price used in the Class 4b formula increases above the value of the make allowance, the whey value of the Class 4b formula increases which is favorable for producers and unfavorable for processors because the Class 4b price rises. On the other hand, when the whey commodity price used in the Class 4b formula decreases below the value of the make allowance, the whey value of the Class 4b formula decreases which is favorable to processors and unfavorable for producers.
 - The effect of the variable portion of the whey make allowance is that it increases when the price of the whey commodity is above the make allowance set in the formula and decreases when the price of the whey commodity is below the make allowance set in the formula. As a result, the variable make allowance causes the whey value to be less volatile than the whey commodity price so that the negative effect on processors is less when whey commodity prices are high and the negative effect on producers is less when whey commodity prices are low.

October 10 and 11, 2007 Hearing

- Multi-tier pricing: Maintain the previous whey factor but include multi-tier pricing where different Class prices are paid based on the amount of milk purchased by a processor. (Humboldt Creamery)
 - Each processor would pay one discounted Class price for the first portion of milk they purchase in the month and then pay another Class price for the remaining milk they purchase in the month.
- Pool Credit: Maintain the previous whey factor but provide a credit for processors on their pool obligations for the first portion of solids-not-fat they purchase in the month. (Alliance of Western Milk Producers, Milk Producers Council and Western United Dairymen)
 - Each processor would receive a credit or discount up to a specific quantity of solids-not-fat they purchase in the month and then pay the announced Class price for the rest of the milk purchased.