

# UNDERSTANDING THE PRODUCER PRICE DIFFERENTIAL

The Federal Order milk pricing system is often considered complex and difficult to grasp. Among the various concepts, the producer price differential (PPD) is often misunderstood. This article is intended to explain the PPD and some of the pricing mechanisms that cause the PPD.

First, it is important to recognize the dynamic between the four different Classes of milk. The Classes refer to the products the milk is processed into:

- Class I (fluid milk),
- Class II (soft dairy products),
- Class III (hard cheeses),
- Class IV (powder and butter).

Each month, the prices are announced for each Class of milk, and typically the prices are scaled so that Class I is the highest and Class IV the lowest. See Table 1.

Class	Description	Price	Utilization	Total Value
Class I	Fluid	\$21.86	40.1%	\$8.77
Class II	Soft Dairy Products	\$15.29	19.6%	\$ 3.00
Class III	Hard Cheeses	<b>\$16.76</b>	24.0%	\$ 4.02
Class IV	Powder, Butter	\$14.56	16.3%	\$ 2.37
Market Administrator Adjustments				\$ 0.39
Uniform Blend			100%	<b>\$18.55</b>
PPD (Uniform Blend – Class III)				<b>\$1.79</b>

Table 1. April 2008 prices released by the Northeast Market Administrator

Each month, the processing plants associated with the Federal Order, pay the Market Administrator (M.A.) for the milk they purchase. The processors pay price is determined by the product Class they produce. Therefore, if a fluid processor buys milk, they pay the Class I price to the M.A., and if a butter processor buys milk, they pay the Class IV price to the M.A. All the money collected is paid into the pool (total fund of dollars collected for milk purchased by processors), which is administered by the M.A. At the end of the month, the M.A. calculates the Uniform Blend price, which is done through the process of pooling (gathering all monies and redistributing on an equal basis to all farms). The Uniform Blend price is intended to pay all producers the same base payment regardless of the plant their milk is delivered to, or shifts in market demand.

Here in the Northeast, producers are paid on their component values for butterfat, protein and other solids. Being paid on components is also referred to as the Class III pay price, which has standard component levels for butterfat (3.5%), protein (2.99%) and other solids (5.69%).

<p>Class III Price =                  Butterfat Price x 3.5% Butterfat                  Protein Price x 2.99% Protein                  Other Solids Price x 5.69% Other Solids</p>
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Since producers are paid based on components (Class III price), the PPD is added to the Class III price in order to pay them the Uniform Blend price. The relationship between the Class III price and the PPD is typically an inverse relationship. Therefore as the Class III price increases, the PPD will decrease, as the gap between the Uniform Blend price and the Class III price gets smaller. Certain shifts in market trends result in abnormal pricing conditions, where the Class III price moves higher than the Uniform Blend price and the resulting PPD is negative.

*The following is an example of abnormal conditions which resulted in a negative PPD:*

On May 23, 2008, the Class I price was announced at \$21.43, and the Class II price was announced at \$16.19. Six weeks later, the Class III price was announced at \$20.25, and the Class IV price was announced at \$15.92. Since the Class III price was significantly higher than the Class II and Class IV price, the Uniform Blend price was calculated at \$19.56, lower than the Class III price (\$20.25). This resulted in a negative PPD (-\$0.69). See Table 2.

Class	Description	Price	Utilization	Total Value
Class I	Fluid	\$21.43	43.8%	\$ 9.39
Class II	Soft Dairy Products	\$16.19	22.7%	\$ 3.68
Class III	Hard Cheeses	<b>\$20.25</b>	16.7%	\$ 3.38
Class IV	Powder, Butter	\$15.92	16.8%	\$ 2.67
Market Administrator Adjustments				\$ 0.44
Uniform Blend			100%	<b>\$19.56</b>
PPD (Uniform Blend – Class III)				<b>-\$ 0.69</b>

Table 2. June 2008 prices released by the Northeast Market Administrator

Another way of saying this is farmers were paid more for their Class III components than the entire blend pool was worth. To get the blend pool to balance, the M.A. had to take money (the negative PPD) out of each producer's Class III components.

It is critical to remember that producers are always paid the Uniform Blend price, regardless of positive or negative PPDs. The money collected by the pool is paid out to producers, but sometimes the Class III price is disproportionately higher than the other Classes of milk, and the money collected by the M.A. will not cover the Class III price payment to producers. Additionally, when the Class III price increases, the value of the butterfat, protein and other solids also increases, resulting in an overall higher price for the producer, even if the resulting PPD is negative.