

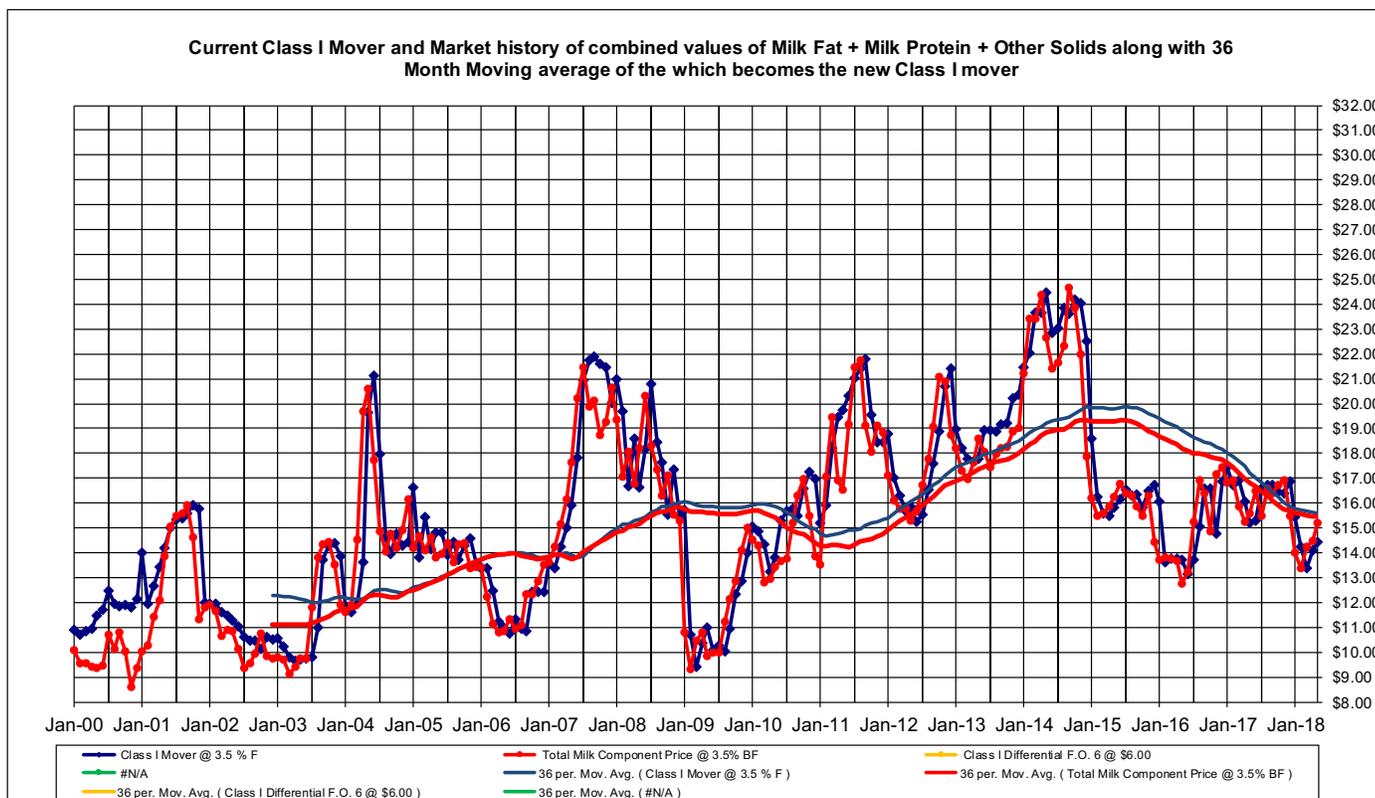
## Ration-all Milk Pricing

Two Tiered, 100% Market Based Pricing System: – That stabilizes and more properly values the fluid milk being consumed everyday separately from the other milk products produced from milk and the marginal milk that may or may not be needed in the current market place.

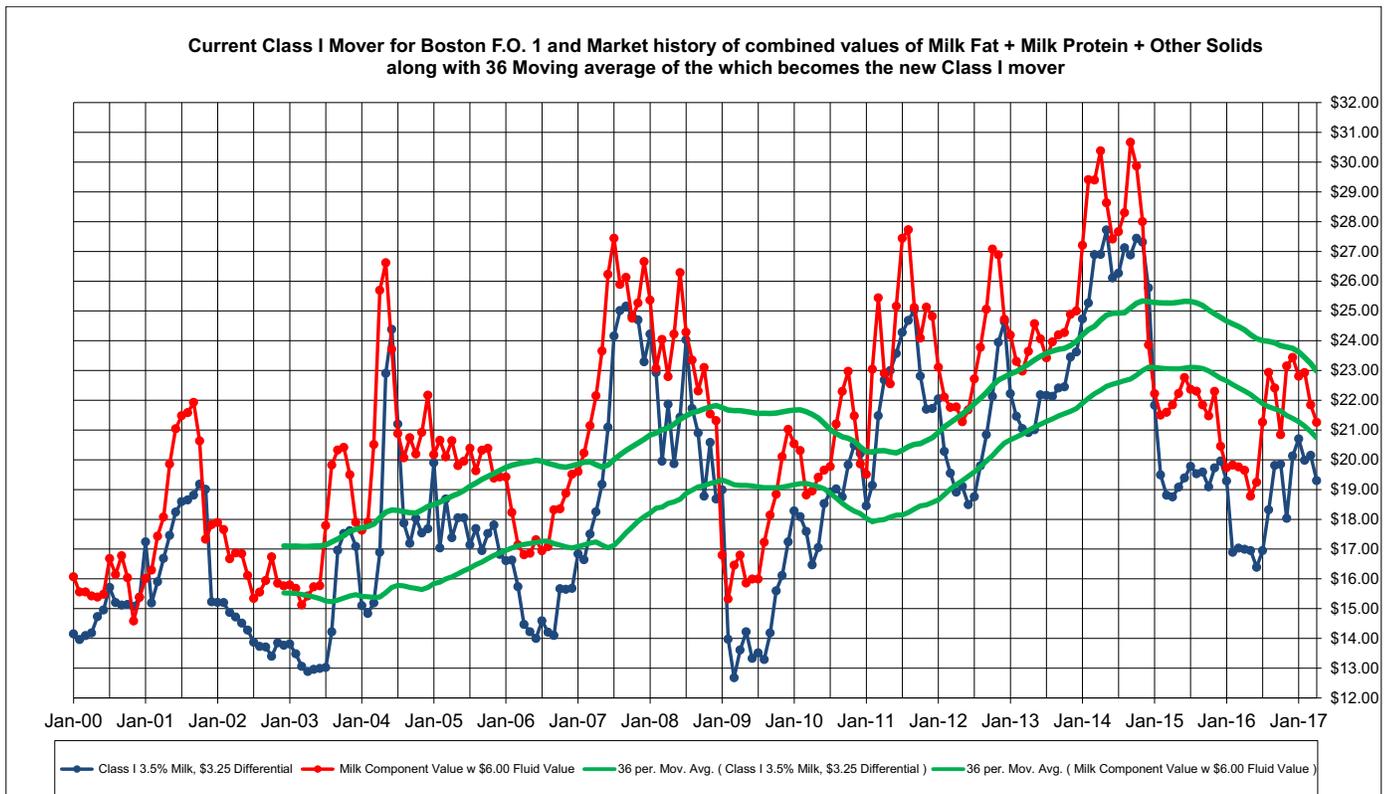
- First Tier: Fluid Milk
  - Prices the fluid milk in each federal order at the 36 month moving average price for the milk solids (BF, Milk Protein and Other Solids) along with a fluid value. The fluid or beverage value at a suggested price of at least \$6.00 / cwt. or about \$.52 / gallon replaces the current class I differentials that range from \$1.60 up to \$6.00 / cwt.
  - The \$6.00 fluid value can easily be justified when the current over order premiums in most areas are added to the current differentials.
  - The 36 Month moving average price of the milk solids reflects market history without the daily, weekly and monthly volatility of the current pricing system.
  - It more accurately prices the milk that is being consumed every day at a price that is insulated from the volatility of the prices produced by the supply and demand signals of the **marginal milk production**.
  - The fluid value more accurately values the milk that is sold as 2%, low fat and skim milk which is often retailed at the same price as whole milk.
  - It stabilizes dairy farm cash flow to allow better long and short term business and management decisions.
  - It eliminates or reduces the need for price supports, subsidies, counter-cyclical and insurance type programs.
  - It stabilizes the prices for the **producers**, processors, co-ops, retailers and **the consumer**.
  - It allows processors to enter long term contracts with the retailers and the restaurants at much more predictable and stable prices.
  - The new fluid component value added to the value of the milk solids would be the same in all federal orders for class I or fluid milk. This value would be pooled in each federal order separately based on the % utilization in each federal order.

The charts below illustrates with the **blue line** the history of the U.S. class I mover @ 3.5% BF before any class I differentials are added. The **red line** shows combined value of the milk components with BF @ 3.5%. As you see they are nearly identical along with the 36 month moving averages. The current system for pricing class I milk uses the higher of class III or class IV manufacturing milk. This causes the class I pricing to be much more volatile than it would need to be because the class III and IV prices are very sensitive to the supply and demand signals of the marginal milk from the world markets even though class I milk is a domestic market. The class I fluid milk for the domestic markets provides the opportunity to stabilize a significant amount of the milk price by just changing the class I mover to a moving average of the component values. This new class I mover will be insulated from the short term volatility while still being tied to the longer term values. This pricing system is market based so there is no added cost to the dairyman or the taxpayer.

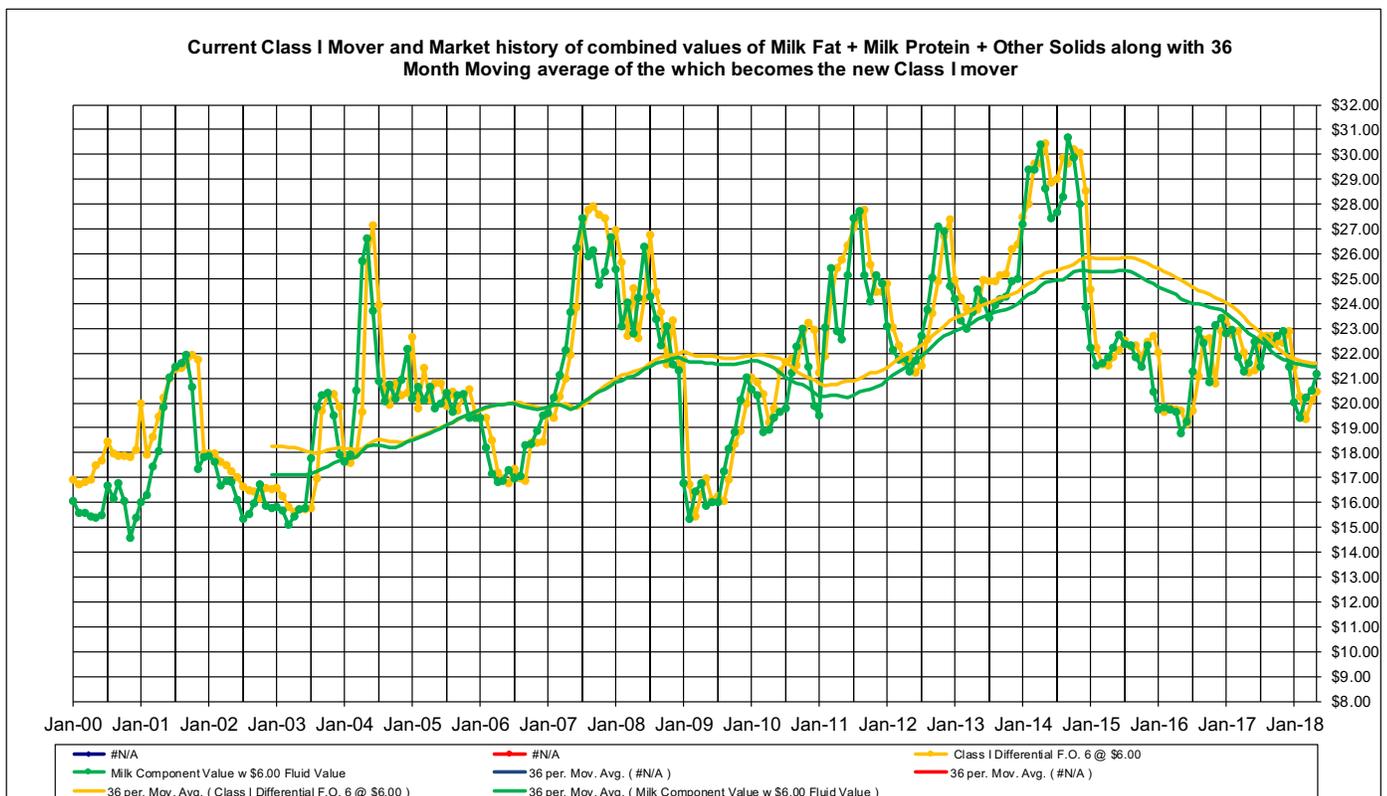
As the chart shows the June 2016 class I price was \$13.14 but the 36 month average of the components would have been over \$18.00. Conversely in May 2014 when the class I mover was \$24.47 the 36 month average of the components was just over \$19.00. By using the 36 moving average volatility is greatly reduced.



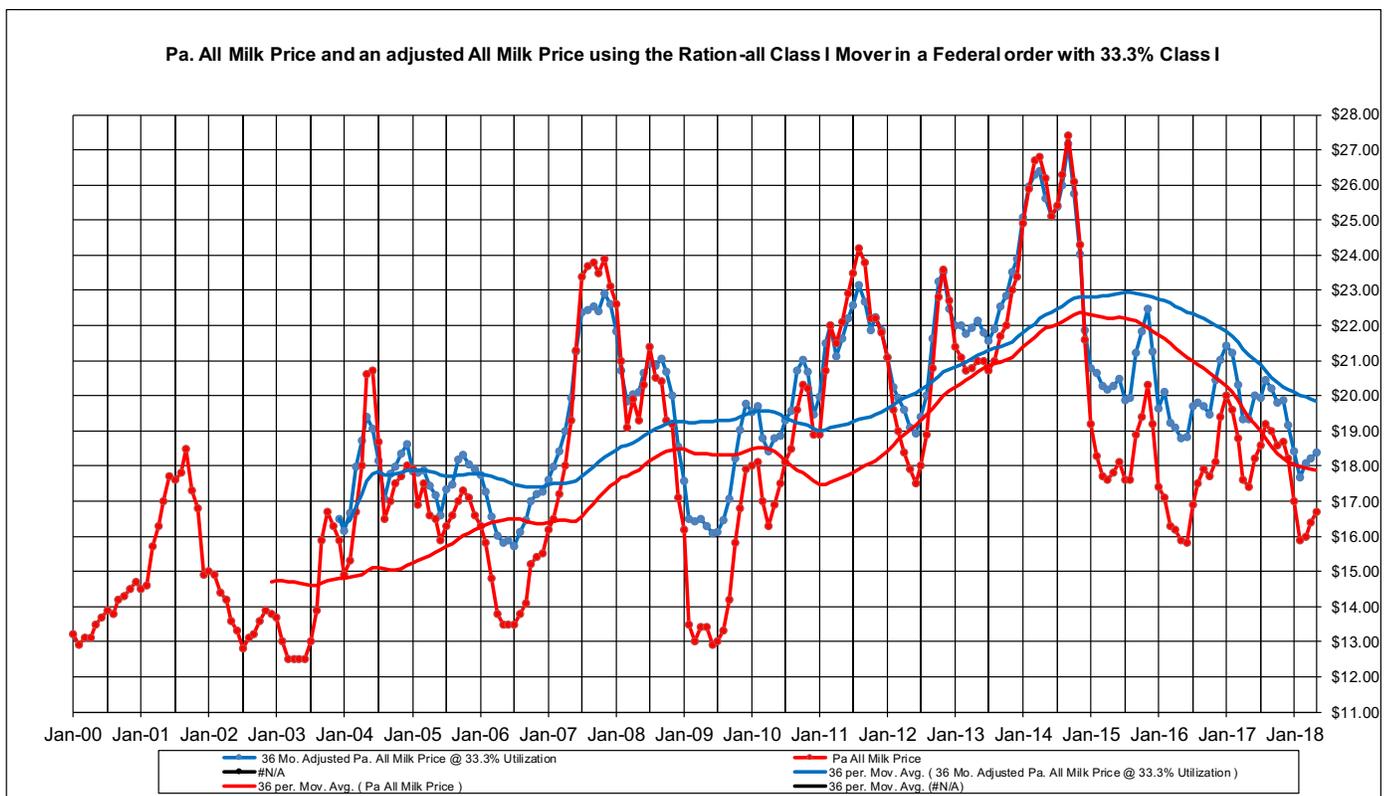
The next chart shows the history of the Boston F.O. class I price with a \$3.25 differential at 3.5% BF with the **blue line**. The **red line** is the combined values of the milk components with the \$6.00 fluid value which when used to calculate a 36 month moving average becomes the **new class I mover**. As you can see for June 2016 the announced class I at the \$3.25 differential is **\$16.39** but would be over **\$24.00** using the new class I mover. You can see how much the volatility for the class I milk is reduced by comparing the green line to the blue line for any month.



The next chart shows the **current class I mover with the current \$6.00 differential** that is paid in the Florida F.O. 6. And the **second line is the combined value of the milk components including the \$6.00 fluid value**. As you see they are also nearly identical including the moving average. The new class I mover is illustrated with the **36 month moving average of the components values**. This chart illustrates how the current pricing system produces periods of high prices that at some point do begin to affect consumption and opens the doors to substitution of other products. During 2014 the price peaked at over \$30.00 or \$6.00 higher than the moving average at that time. Over the previous 36 months the average price is the same for both pricing systems, but much less volatile for the **dairyman**, the processor, the retailer and the **consumer**. This system would not eliminate over order premiums in areas that still need them, but would considerably reduce them in most areas. For example this order even with the \$6.00 class I differential has a \$4.21 over order premium for March 2012. The simple average of the over order premiums for March 2012 for the major cities was \$2.41.



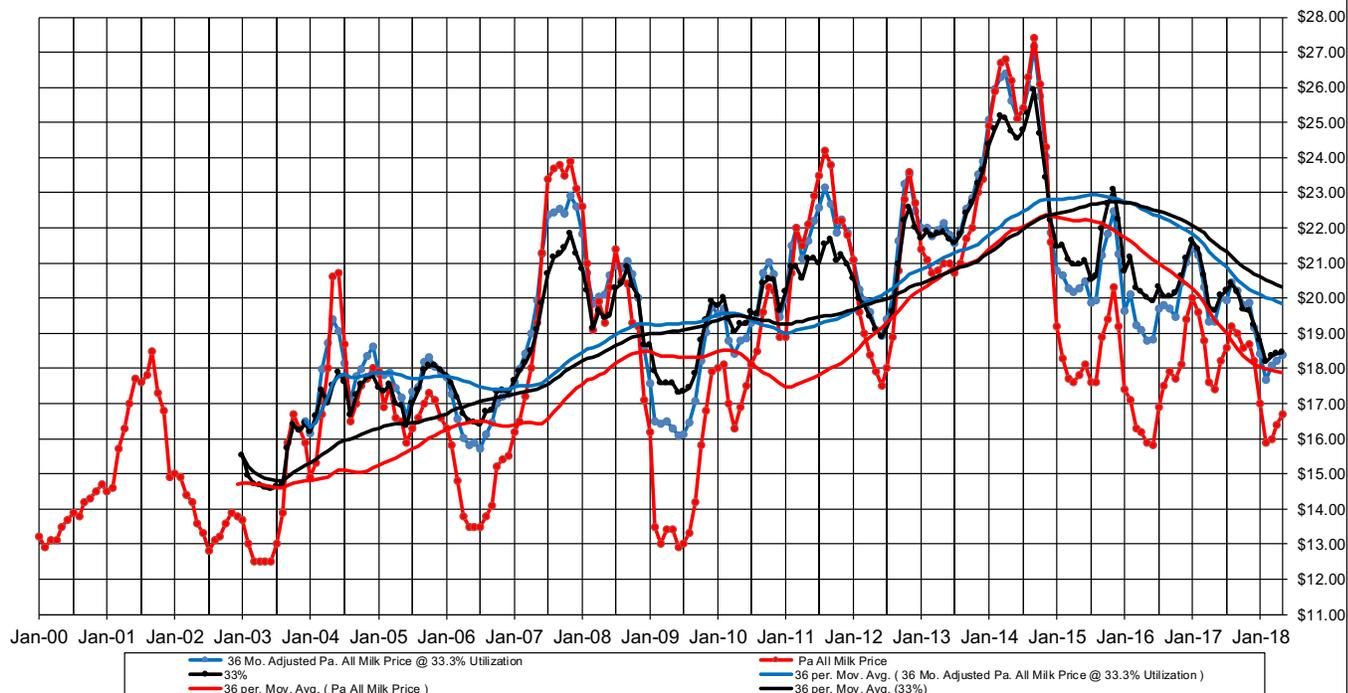
The next chart shows what the effect of the new class I mover would have been in Federal Order 33 where the current differential is \$2.00. The **red line** is the reported All Milk Price for the state of Pa. along with a 36 month moving average for reference. The **blue line** is the Pa. all milk price adjusted to what it would have been if the proposed class I mover would have been in effect. The Pa. all milk price would have been \$18.63 instead of \$15.80 for June 2016 with a class I utilization of 33.3%. As can be seen the volatility is dramatically reduced especially during the extreme years. The other federal orders would have a similar difference depending on the class I utilization percentage.



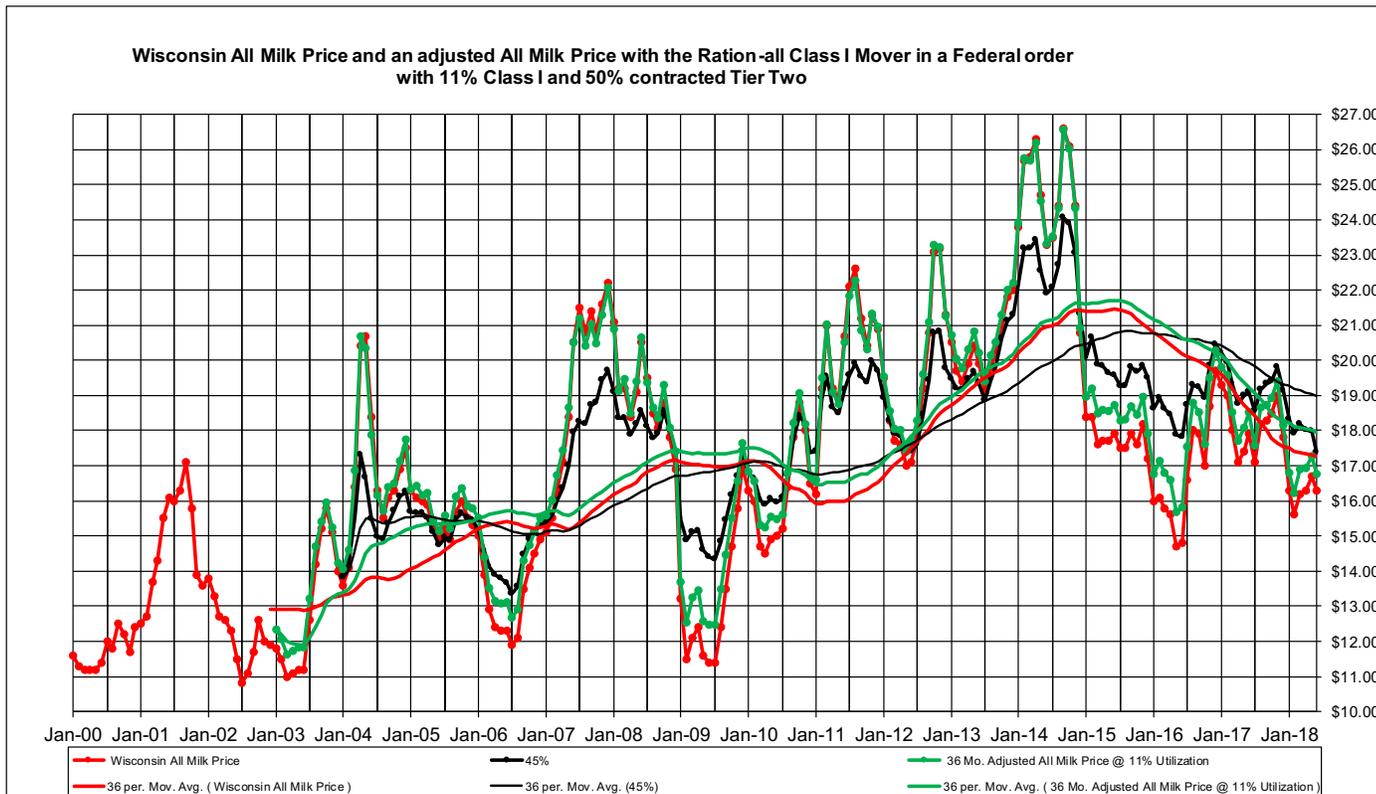
- Tier Two: Manufacturing Milk

- To stabilize the price of milk used for manufacturing each dairyman would have the option but not required to forward contract some percentage of his milk produced over his federal order class I utilization at the 36 month moving averages for each component up to the amount his handler can forward contract with their buyers.
- This type of optional forward contracting should have no issues under the WTO agreements.
- The current forward contracting programs offered since the late 1990's have failed because they are still based on the same volatile CME markets that influence the NASS survey prices.
- Each dairyman in each federal order could work with his coop or processor to forward contract some % of milk components based on his desire to manage risk. The 36 month moving average for the components provides a stable basis that the processor can then offer forward contracts to his customers. The following chart is the same Pa. chart with **50%** of the manufacturing components contracted at the 36 month average in addition to the class I milk. So a total of 83.3% of the dairyman's milk is forward contracted and stabilized. The **black line** illustrates the adjusted all milk price. As you see the June Pa. all milk price would be \$20.29 instead of \$15.80 using this two tiered pricing system. The volatility is reduced and risk is truly management by the contracts and the markets not just transferred to someone else as traditional forward contracts do.

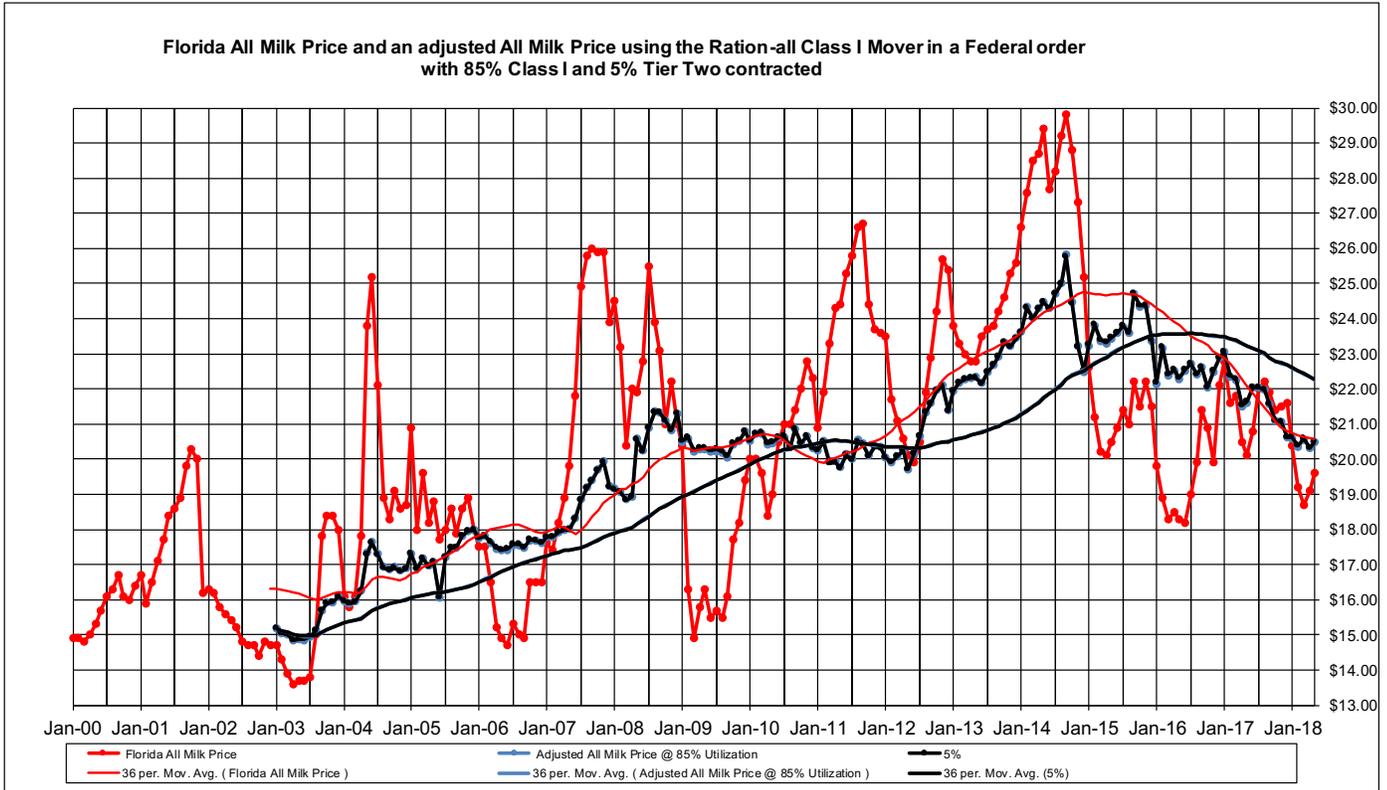
Pa. All Milk Price and an adjusted All Milk Price using the Ration-all Class I Mover in a Federal order with 33.3% Class I



While the F.O. 33 western pa. class I utilization at 33.3% is close to the national average let's look at how this pricing system would look in Wisconsin with a low class I utilization at 11% if a dairyman contracted 50% of his Tier two milk for a total of 61% of his milk price stabilized. As the chart shows the new class I mover would have increased the April 2016 Wisconsin all milk price from \$14.80 to \$15.83 if none of his additional production was contracted but if 50% of his Tier Two milk was contracted then his all milk price would have increased to \$18.04.



Next I will show an average of F.O. 6 & 7 Class I utilization of 70% with 20% of the additional production contracted for a total of 90% stabilized. As the chart shows the new class I mover would have increased the April 2016 Florida all milk price from \$18.50 to \$21.81 and by contracting the Tier Two milk at 20% of his production it would have increased to \$22.10.



While this pricing system dramatically reduces price volatility it only affects one side of the equation that the **Margin Protection Plan** is based on. Since this pricing system stabilizes the price, the margin could be still low if feed cost were to rise dramatically over a short time. But since the MPP protects margin over the calculated national feed cost I believe it could be the type of protection for that situation with the premiums reduced to reflect the dramatically lower risk.