DATE: December 2, 2016
TO: Directors & Members
FROM: Rob Vandenheuvel, General Manager

**MPC FRIDAY MARKET UPDATE**

<table>
<thead>
<tr>
<th>CHICAGO CHEDDAR CHEESE</th>
<th>CHICAGO AA BUTTER</th>
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</thead>
<tbody>
<tr>
<td>Blocks - $0.0500</td>
<td>$1.8100</td>
</tr>
<tr>
<td>Barrels - $0.0750</td>
<td>$1.6150</td>
</tr>
</tbody>
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Weekly Average, Cheddar Cheese

| Blocks - $1.0000 | $1.7950 |
| Barrels - $0.0750 | $1.6400 |

**NON-FAT DRY MILK**

Weekly Change +$0.1375, Weekly Average +$0.1257

<table>
<thead>
<tr>
<th>Week Ending 11/25 &amp; 11/26</th>
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</thead>
<tbody>
<tr>
<td>Calif. Plants $0.9108 5,646,530</td>
</tr>
<tr>
<td>Nat'l Plants $0.9176 10,090,863</td>
</tr>
</tbody>
</table>

**DRY WHEY**

Dairy Market News w/e 12/02/16, National Plants w/e 11/26/16

<table>
<thead>
<tr>
<th>Prior Week Ending 11/18 &amp; 11/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calif. Plants $0.9271 7,376,468</td>
</tr>
<tr>
<td>Nat'l Plants $0.9126 13,719,659</td>
</tr>
</tbody>
</table>

**FRED DOUMA’S PRICE PROJECTIONS…**

Dec 2 Est: Quota cwt. $17.63 Overbase cwt. $15.93 Cls. 4a cwt. $14.65 Cls. 4b cwt. $16.96

Nov ’16 Final: Quota cwt. $17.20 Overbase cwt. $15.50 Cls. 4a cwt. $13.69 Cls. 4b cwt. $17.45

**MARKET COMMENTARY: (By Sarina Sharp, Daily Dairy Report, sarina@dailydairyreport.com)**

**Milk & Dairy Markets**

For the last time ever, traders in Chicago pressed phones to their ears and shouted over one another to bid or offer nonfat dry milk (NDM) at the CME spot market. The trade was uncharacteristically lively, and for the first time since October 2015, the NDM market topped a dollar. It closed at $1.0075/lb., up 10.75ȼ in the past two weeks.

Open outcry trading for spot butter and Cheddar will go the way of the dinosaur in the coming months. Today, spot butter finished at $2.185, a level not seen since the sizzling summer rally, and some 15.5ȼ higher than where it stood two weeks ago. Class IV futures posted sizeable gains; the January contract has added nearly a dollar since the Friday before Thanksgiving. Butter futures were buoyed by a larger than typical decline in butter inventories in October. Stocks at the end of the month totaled 227.7 million pounds, down 15.4% from September but still 27.4% greater than a year ago. However, if demand continues to empty the warehouse at the current pace, butter stocks at year-end will be comparable to year-ago levels. The seasonal drawdown will be bolstered this year by robust cream demand from Class II manufacturers and from Canadian buyers.
While the Class IV products heated up, Cheddar melted down. Spot Cheddar blocks closed today at $1.81, a dime lower than the admittedly lofty prices of two weeks ago. Cheddar barrels closed at $1.615, down 13.5ȼ. Fresh barrels are reportedly plentiful, which is weighing on the spot cheese market. And aged cheese stockpiles remain burdensome. USDA reported cheese inventories on October 31 at 1.216 billion pounds, 6.1% greater than last year. The month-to-month decline was less than inspiring.

But the futures market expects that continued holiday demand and waning global production will chip away at the excess. Cheese futures have been buoyant, and the whey market is decidedly strong. Trading volumes have impressed; yesterday more than 4,000 Class III futures contracts changed hands, a volume that had been achieved only a handful of times in the past. Every Class III contract through the end of next year traded above $17.00 today, although the April and May contracts settled a little below that mark.

That is not to say that all is well on the dairy. California’s 4a milk price in November was a woefully inadequate $13.69, but it was 58ȼ better than that of October. USDA announced the November Class IV milk price at $13.76, up a dime from the previous month but $3.13 lower than it was a year ago. At $16.76, the November Class III price was $1.94 higher than that of October and $1.46 greater than November 2015. California 4b milk was an impressive $17.45, up $3.02 from the month before.

The national All-Milk price for October was $16.60, down 70ȼ from October and $1.10 lower than October 2015. But national average feed costs remained low, so on paper dairy margins are looking fine. In the September-October pay period, income over feed costs in the margin protection program was $9.16/cwt., well above the highest $8 coverage level. However, on some dairies, the reality is decidedly different than the national average implies. An uptick in herd dispersals and falling cow values reveal the financial strain.

But the future looks brighter. This is largely due to a significant slowdown in overseas milk output. Oceania milk production peaks in October, and this year’s flush was not impressive. New Zealand reported a 5.5% year-over-year deficit, and milk solids production was down 6.1%. This puts season-to-date collections 2.4% below the first five months of the 2015-16 season on a fluid basis, while milk solids production lags last season by 2.9%.

In Australia, October milk collections slumped 11.4% from the year before to 968 million liters. This is the first time since at least the turn of the century that October milk production has failed to
top one billion liters. That puts season-to-date output at a 10.4% deficit year over year. The Daily Dairy Report notes, “Compared to the same month in 2015 Australia has posted double-digit declines in three of four months this season, the first declines of this magnitude since the 2006-07 season.”

Milk production remains depressed in South America and is waning in Europe. USDA estimates that Chinese milk output in 2016 will fall 5% from last year, driven by lower milk prices and a 10% decline in the dairy herd. Next year production is expected to be steady at best.

The shortfall in Chinese milk production has helped to boost imports. Writing for the U.S. Dairy Export Council, Alan Levitt and Marc Beck report, “In the first three quarters of the year, [Chinese dairy product] imports were up 16% vs. last year on a milk-equivalent basis, but still down 15% from 2014 volume.” They also note that two years ago, milk powder accounted for 60% of Chinese dairy product imports (on a milk-equivalent basis), but that share has dropped to 43% as China’s appetite for foreign milk, infant formula, whey products, and cheese has climbed to record volumes.

In October, Chinese milk powder imports totaled 42.4 million pounds, slightly shy of last year’s lackluster volume. However, Chinese cheese imports were up 39% from a year ago. China imported 24.6% more ultra-high temperature milk and 9.1% more whey in October than the previous year.

Grain Markets
Anticipating a spending boom in the new administration and echoing bullish speculation in China, traders have been snapping up commodities of all varieties. The oil market has been particularly strong, as OPEC and similarly minded oil producers have committed to reducing output in order to boost prices. This is an about-face from their previous strategy of allowing oil prices to stay low in order to discourage the U.S. oil production boom, and it’s unclear that the new scheme will work in the long run. But for now, the oil market is soaring, and it has taken the oilseed markets along for the ride. January soybeans stand at $10.275 per bushel, up more than 30¢ in the past two weeks.

Strength in soybean prices is especially remarkable in the face of a stronger dollar. The soybean market has been more resilient than grain futures because global oilseed stockpiles are adequate but not burdensome, and because U.S. exports have been robust. But in a few months, exporters will shift their attention to South America, and pronounced weakness in the real makes Brazilian soybeans more attractive. Importers who can afford to wait might favor product from our competitors.

The corn market tried gamely to keep pace with soybeans, but this week it fell behind. Yesterday March corn futures touched two-month lows. Today they rebounded and finished at $3.4725, down 6.25¢ over the past two weeks.

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CALIFORNIA CLASS 4B ABOVE FEDERAL ORDER CLASS III IN NOVEMBER: (By Rob Vandenheuvel) After 82 consecutive months (6 years, 10 months) of California’s Class 4b price lagging below the Federal Order Class III price – at an average discount of $1.61/cwt during that time – November 2016 marked the first time since December 2009 that the Class 4b price was above the Federal Order Class III price (by $0.69/cwt)! It’s a rare occasion to say the least; this is the 12th time it has happened in the past 10 years.
So why did this happen? Does this indicate a fundamental change in the relationship between the California Class 4b and Federal Order Class III prices? **In a word, NO.** Our California Class 4b formula is still structured in a way that will result in a **consistent discount** compared to the Federal Order Class III prices (**somewhere to the tune of $0.70-$0.90 per cwt over the long term average**). Within that long-term average, there will be larger and smaller gaps month-to-month, due primarily to timing differences between how the California and Federal Order formulas determine the “market prices” for Cheddar cheese. California’s Class 4b formula relies on daily CME activity for block Cheddar cheese, while the Federal Order Class III formula relies on weekly National Dairy Products Sales Report (NDPSR) weighted average prices for both block and barrel Cheddar cheese. Typically, the CME price – which is based on just a few transactions per day – tends to rise and fall more quickly than the NDPSR price, which includes the prices paid for millions of lbs of Cheddar cheese each week. Further, on rare occasions – such as now – a temporary yet significant spread between the market prices of blocks and barrels can drive a larger gap between the two price series as well.

So in short, the benefit that California producers get in rising commodity prices (**by capturing those price increases more quickly**) is inevitably given back when commodity prices are falling (**by capturing price decreases more quickly**). Over a longer time frame, our estimate will unfortunately hold true that the average Class 4b price will be below the Federal Order Class III by about $0.70-$0.90 per hundredweight, depending on market conditions.

Having said that, it is worth noting that the adjustments made last year by CDFA to the dry whey component of the Class 4b formula are generating much needed additional revenue for California’s producers in 2016, compared to the previous calculation. For those who are curious, that change in August 2015 added $0.48/cwt to the Class 4b price in November (or about $0.22-0.23/cwt to the Overbase price). The Federal Order Class III price still saw a larger bump from the dry whey markets than California’s formula generated, but the gap was much smaller (about $0.07/cwt). Of course, we continue to anxiously await word from the U.S. Department of Agriculture on their “Recommended Decision” regarding a California Federal Milk Marketing Order, as that is our best opportunity for a long-term level playing field for our California dairy families. 1 month out of 83 is simply isn’t going to cut it.

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**FOLLOWUP – CALIFORNIA’S SENATE DEMOCRATS SECURE THE 2/3 SUPERMAJORITY:** (By Rob Vandenheuvel) Two weeks ago, we reported that California State Senate District 29 (Diamond Bar region) – which was still up for grabs – was the only thing standing between the State Senate Democrats and a 2/3 supermajority. As the vote counts continued to come in, that seat was secured by Democrat Josh Newman, giving Democrats their 27th vote in the 40-person chamber.

As a reminder, this supermajority is making news because it means that if all the Democrats vote together, they will now have enough votes to approve tax increases, place items on the statewide ballot, enact laws immediately under an “urgency” provision, and/or override a veto by the Governor, all without a single Republican vote. As I noted two weeks ago, this fear is tempered by the fact that there is a range of perspectives within the Democrat party on many issues, with some holding more moderate, pro-business views and others more liberal. But it does, however, still represent significant power granted to the Democrats in Sacramento by the State’s voters, and as I noted a couple weeks ago, this year was a classic example of how aggressive anti-business bills can be approved in the Legislature – such as the regulation of methane on dairy farms and the elimination of overtime rules specifically tailored to agriculture – with just a vote or two over the minimum.

We must continue to pursue every opportunity we can to engage our elected officials and find ways to expose them to the impacts their decisions in Sacramento have on your ability to operate a dairy in California. As we’ve seen, the damage they can do to our industry long-term is devastating and virtually un-reversible. So whether it’s inviting our local Legislators out to your dairy, or attending meetings and townhalls to voice our thoughts, we will need all-hands-on-deck as these folks set off with a fresh, new agenda in 2017.