

BEFORE THE PENNSYLVANIA MILK MARKETING BOARD

OVER – ORDER PREMIUM HEARING

ALL MILK MARKETING AREAS

March 3, 2021

Testimony of Dennis J. Schad

Presented on behalf of Pennsylvania Association of Dairy Cooperatives:

Dairy Farmers of America, Inc.,

Lanco Dairy Farms Co-op, Inc.,

Land O' Lakes, Inc., and

Maryland & Virginia Milk Producers' Cooperative Association, Inc.

This testimony is presented on behalf of the Pennsylvania Association of Dairy Cooperatives (“PADC”), whose members include Dairy Farmers of America, Inc., Lanco Dairy Farms Co-Op, Inc., Land O’Lakes, Inc., and Maryland and Virginia Milk Producers’ Cooperative Association, Inc. (Cooperatives)

My name is Dennis Schad. My education qualifications include a Bachelor’s Degree in History from The College of William and Mary in Virginia and a Master’s Degree in Business Administration from the Virginia Polytechnic Institute and State University. Until my retirement in 2017, I worked for Land O’Lakes and its predecessor cooperatives in Pennsylvania for 36 years. During that span of years, I held positions in the cooperatives’ field, transportation, marketing, and dairy policy departments, I have qualified as an expert in dairy marketing and economics, while testifying in numerous state and federal milk marketing and pricing hearings.

The Notice of Hearing declares its purpose shall be to take testimony concerning the level of the over-order premium that will be effective April 1, 2021. PADC requests that the Board continue the current Order (OGO A-1008) which provides for a \$1.00 per cwt. premium for six months. PADC also advocates that the fuel adjuster which moves with the price of diesel fuel continue through the period.

Section 801 of the Milk Marketing Law provides the Milk Marketing Board the authority to set producer prices. This section requires the Board to base such prices “on all conditions affecting the milk industry”, including the producer cost of production, the level of Pennsylvania’s Class I reserve supply, and conditions in the marketplace for Pennsylvania produced milk. This testimony will address the economic conditions of the Commonwealth’s dairy farmers and the marketplace. This testimony is meant to take the current futures markets of milk and feed commodities and project the dairy environment into the period covered by the PADC request.

Milk Production

Reacting to higher prices at the end of 2019, dairy farmers in the 24 states that account for 94 percent of the nation’s milk supply pushed production above 2019 levels. By the middle of 2020, production dropped drastically due the crashing prices and the production limitations placed by handlers to address the supply chain interruptions caused by the government’s COVID shelter-in-place orders. Beginning in June of 2020 higher prices and increased consumer sales through adaptations in distribution channels brought about milk production increases. Exhibit 14 shows national milk production for the last three years on a per day basis. In spite of the mid-year decreases, aggregate milk production in 2020 exceeded 2019 totals by 2.1 percent. Growth continued into the fourth quarter where the production of milk increased to a 3.0 percent.

While following similar monthly trends as the national, Pennsylvania milk production increased only moderately from year earlier totals. Exhibit 15 shows the Commonwealth's daily milk production for the last three years. Through most of 2020, Pennsylvania's dairy farmers only incrementally increased their milk production from year earlier levels. In the aggregate, the state's 2020's milk production was only 1.2% above year earlier totals.

Commercial Disappearance

The COVID Pandemic and its resulting stay-at-home orders played havoc with the normal channels of dairy sales and distribution to consumers. Restaurant and school closures severely limited food service sales in 2020. In a normal year about half of cheese sales are purchases by consumers outside of their homes. During the second and third quarters the dairy supply chain adapted to the new COVID distribution realities. Pizza sales increased and government purchases of cheddar for the Farmers to Families food boxes kept cheese plants running. On the whole, commercial disappearance of cheese fell by only 0.4 percent in 2020.

The decrease in food service sales of butter were mitigated by a strong increase in at home cooking. Aggregate butter sales decreased by only 0.2% from 2019 levels. Dairy powders performed its market clearing role in 2020 as exports of dairy products surged. Through November exports of nonfat dry milk powder grew by 19.3 percent from year earlier levels and are poised to set an annual record. While not quite at record setting levels, whey exports grew by 23.6 percent in 2020. (Mark Stephenson, "Pandemic, prices, and PPDs . . . What will 2021 offer?", Hoard's Dairyman Webinar, January 14, 2021)

While consumption of fluid milk did not increase last year, the rate of decline slowed. Between 2018 and 2019 national sales of fluid milk declined by 1.8 percent. Federal order data through November of 2020 show that the rate of decline of sales decreased to 0.3 percent. Locally, federal order statistics can provide an incomplete indication of Pennsylvania milk sales. The Northeast Federal Order which regulates and reports milk sales for the eastern portion of the Commonwealth, reported a decrease of fluid sales by 1.8 percent from year earlier. (Estimated Fluid Sales, USDA-AMS, November 2020)

Stocks of dairy products usually build at the end of the year. However, increasing milk production and last year's lower sales combined to leave dairy inventories at high and burdensome levels. At year end butter stocks were up 84 million pounds or 44.4% above December 2019. American type cheese hit 801.2 million pounds, up 51.3 million pounds or 6.8% above a year ago. The "other" cheese category also increased by 28.8 million pounds or 5.3% above a year ago. In the aggregate the nation's total cheese inventory amounted to 1.398 billion pounds, up 75.9 million pounds or 5.7% above a year ago. (Cold Storage Report, USDA-NASS, January 25,2021)

Cost of Production

USDA studies indicate that the cost of feed, both home-grown and purchased, represent more than 60 percent of the cost of milk production. At the national level, increased acreage and higher yields of corn and soybeans pushed both crops to return to more typical production levels, according to USDA's 2020 Crop Production Annual Summary.

USDA reported the nation's corn growers produced 14.2 billion bushels, up 4% from 2019. Corn yield in the United States is estimated at 172.0 bushels per acre, 4.5 bushels above the 2019 yield. Area harvested for grain, at 82.5 million acres, is up 1% from 2019. Soybean production for 2020 totaled 4.14 billion bushels, up 16% from 2019.

Last summer's dry weather stressed the Commonwealth's corn crop, causing a decline in production of 24 million bushels, a 15 percent change from the previous year. While the state's acreage planted in corn increased marginally by 50 thousand, yields fell by 9 percent to an average of 138 bushels. As the state's alfalfa yield per acre remained unchanged at an average of 3 tons, last year saw a 36 percent increase in acres planted, causing an increase of 413 thousand tons. (Crop Production, 2020 Summary USDA, January 12, 2021.)

Feed prices have increased markedly during the last half of 2020. In August the corn futures price, as reported by the CME, for a March 2021 delivery was between \$3.35 and \$3.65 per bushel. In late January that contract increased in price to around \$5.30 per bushel. Likewise, the March soybean meal futures price was around \$300 per ton in August and is now trading at \$435 per ton. Current futures prices indicate corn prices averaging over \$5.00 per bushel and soybean meal prices in the \$400 per ton range in the period covered by this proposed premium order.

Milk Prices

The All-Milk Price is defined as the total price received by a dairy producer at the producer's protein and butterfat tests plus all premiums received. Penn State issues its monthly Dairy Outlook which provides a forecast of the All-Milk Price for the following 12 months. Exhibit 16 is a graph that shows the Pennsylvania All-Milk Price from 2018 through 2020, plus the PSU forecasted 2021 All-Milk Price. Note the forecasted 2021 price closely tracks the 2019 price. (Dairy Outlook, Penn State, December 2020)

Exhibit 17 represents the Weighted Average Pennsylvania Mailbox Prices for the last three years. The market administrator of the Northeast Federal Order reports a monthly mailbox price for dairy farmers whose milk is pooled on that order and the Mideast market administrator reports a like price for dairy farmers pooled on that order. Additionally, each market administrator reports a specific monthly Pennsylvania mailbox price, reflecting the price paid to Pennsylvania dairy producers. Of the 6,350 Pennsylvania dairy farmers pooled on the two orders, about nine times

more dairy producers are pooled on the Northeast Order than the Mideast order. The values in Exhibit 17 reflect that weighting.

The Federal Order mailbox price is the net monthly price paid to dairy producers by their handlers, reflecting milk payment at butterfat and protein test, plus premiums, less marketing and transportation deductions. The difference in the gross price reflected in the All-milk Price series and the Mailbox Price series during 2020 is indicative of the costs incurred by dairy producers from the supply and distributions due to the COVID-19 pandemic. While I believe this price series best represents the actual milk price received by the Commonwealth's dairy producers, its reporting lag time causes problems for the purposes of this hearing. This Exhibit would show that 2018 was an unprofitable year for many dairy producers which was followed by a much better 2019. Last year started well for dairy producers, but the consequences of the pandemic caused producer income to crash in the second quarter and be restored in the third quarter.

Mark Stephenson at the Wisconsin Center for Dairy Profitability noted that there were additional sources of income available in 2020 to dairy producers from the USDA Margin Protection Program (MPP) and the Coronavirus Food Assistance Program (CFAP). Stephenson estimated that a dairy producer who signed up for the \$9.50 margin protection level would have netted \$0.67 per cwt and those participating in CFAP would have received approximately \$2.45 per cwt. (Mark Stephenson, "Pandemic, prices, and PPDs . . . What will 2021 offer?", Hoard's Dairyman Webinar, January 14, 2021)

Forecasting milk prices into 2021 is an undertaking filled with potential volatility and uncertainty. Among the factors to consider are: the trend of increasing national milk production, the increasing cost of dairy feeds and the uncertainty of when and the extent of the recovery in a post-COVID environment. It remains to be seen how many of the currently unemployed will ultimately return to work and how many of the pre-COVID businesses are viable enough to return. There is also significant uncertainty regarding the effect of the government's purchases of dairy commodities through the Farmers to Families boxes and direct payments to dairy farmers in 2021.

Exhibit 18 reports the National All-Milk Price from 2016 through 2020 (including the CFAP and MPP as reported by Stephenson) and forecasts by Penn State and USDA. Stephenson forecasts an average 2021 All-Milk Price of \$18.50. As noted, Penn State's Dairy Outlook estimated a Pennsylvania All Milk Price for the following 12 months. The PSU forecast, \$18.38, in Exhibit 6 represents a derived price based on the observation that during the last 5 years the PA All-Milk Price has averaged one dollar above the national All-Milk Price. Additionally, USDA provides a forecast of the All-Milk Price for 2021 of \$17.65. (Market Outlook, USDA-ERS, January 2021.) Each of the forecasters estimate slightly lower milk income than 2020.

On January 27 Matthew Gould, a dairy analyst and consultant, participated in a webcast for the Center for Dairy Excellence entitled "2021 Dairy Market Outlook." His observations and conclusions are much as presented in this testimony. He concluded his presentation with a graph

Exhibit 19 that compares national milk production from 2007 through his 2021 forecast with Income over Feed Cost (IOFC) per hundredweight. The historical IOFC is determined by actual prices and Gould's forecast derived through the futures prices of corn, soybeans, and Class III and IV milk. The IOFC is represented by the darker line and is measured by dollars per hundredweight on the left axis, while milk production is represented by the lighter line and is measured by the percentage change in milk production on the right axis.

Gould's forecast of lower milk prices and higher feed costs drive the IOFC under the \$8.00 per hundredweight level, much like the troughs of 2016 and 2018. Gould also expects milk production to increase in 2021 from the fourth quarter of 2021 level of 3 percent.

Summary

Forecasting supplies and demands for dairy products for 2021 is fraught with the uncertainty of the future effects of the COVID pandemic. The success of the vaccines in providing national and international herd immunity, the continued intervention and support of the Government in the economy, whether through feeding programs or changes to the minimum wage, and the speed and the extent in which the nation and the world can return to a pre-COVID normality are only a few of the variables that will affect 2021. However, underlying trends in milk production, feed costs and dairy prices provide a possible window to the future.

Fourth quarter increases in national milk production will continue into 2021 but increases in Pennsylvania milk production will be moderate. Milk prices will be moderate; Class III and IV futures prices point to 2021's average producer prices much like 2020. Last summer's weather provided mixed results for a dairy producer's feed situation; corn production fell while the Commonwealth's harvest of forages increased. In addition, corn and soybean futures prices have risen considerably indicating that that feed costs will increase this year. In summary the Commonwealth's disappointing corn harvest and increases in feed prices combined with increasing national milk production and dairy inventories are negative winds for the Pennsylvania dairy industry.

In the aggregate, economic conditions are such that I recommend that the Board continue the over-order premium at \$1.00 per hundredweight. However, given the many uncertainties facing the dairy industry and Pennsylvania in particular, PADC will continue to monitor the state's dairy economy to ascertain whether additional adjustments are warranted.

On behalf of the nearly 3,171 Pennsylvania dairy farms PADC represents, thank you for the opportunity to present this important information to the Milk Marketing Board