TESTIMONY OF THE INTERNATIONAL DAIRY FOODS ASSOCIATION WITH RESPECT TO PROPOSAL 21
2023-24 FEDERAL MILK ORDER HEARINGS
DOCKET NO. 23-J-0067; AMS-DA-0031

IDFA represents the nation's dairy manufacturing and marketing industry, which supports more than 3.2 million jobs that generate $49 billion in direct wages and $794 billion in overall economic impact. IDFA's diverse membership ranges from multinational organizations to single-plant companies, from dairy companies and cooperatives to food retailers and suppliers, all on the forefront of innovation and sustainable business practices. Together, they represent most of the milk, cheese, ice cream, yogurt and cultured products, and dairy ingredients produced and marketed in the United States and sold throughout the world.

As buyers and processors of milk, the members of IDFA have a critical interest in these hearings. Most of the milk bought and handled by IDFA members is purchased under the Federal milk marketing orders promulgated pursuant to the Agricultural Marketing Agreement Act of 1937 (the "AMAA").

I am Mike Brown, Chief Economist for IDFA since January 2023. I have testified on other proposals earlier in this hearing, and at that time described my professional and educational background. My testimony now will address the reasons why USDA should reject AFBF Proposal 21, which would increase the Class II differential from $0.70 to $1.56.

There are four principal reasons for IDFA's opposition.

a. No evidence suggests a need to raise the Class II differential in order to attract an adequate supply of milk for Class I or Class II needs. To the contrary, the supply is

more than adequate. USDA has previously rejected proposed Class II differential increases on this basis in the National Hearing decision announced in 1993.

b. Raising the Class II differential would lead to the substitution of nonfat dry milk for fluid milk in many Class II products. This opportunity already exists and is already used to some extent. As I will demonstrate with hard numbers, an increase in the Class II differentials as is now being proposed would further shift the economics dramatically in that direction. This would mean that in terms of net milk price, farmers would likely be made worse off by Proposal 21. Rather than receiving $0.86 more via a higher Class II differential, they will be receiving $0.70 less by only being paid the Class IV price for their milk.

c. The significant cost advantage of using nonfat dry milk instead of Class II nonfat solids creates a very uneven competitive surface between stand-alone Class II plants compared to Class I distributing plants that also manufacture Class II products. Class I handlers would not be able to take advantage of the lower priced nonfat dry milk, because they are not allowed to depool, and would still have to account to the pool at the Class II price.

d. Class II has many unique aspects that collectively dictate that Class II regulated minimum pricing provides maximum flexibility to ensure that market forces can match supply with needs throughout the FMMO system. This is particularly important because a uniform Class II minimum price applies in both surplus and deficit milk supply markets. That system is working very well under current Class II pricing and should not be changed.

A. Class II Differentials Should Not Be Raised In Light Of The More Than Adequate Milk Supply.

Current market conditions have created a more than sufficient supply of milk to serve Class I (fluid) needs, the principal impetus behind the FMMO system, as well as Class II needs. Class I milk only constitutes 27% of the milk pooled on federal orders, and only 20% of all milk. This is the lowest utilization rate in the ninety year history of the FMMO system.

Class II only comprises an additional 9% of federal order milk usage. The total FMMO milk supply thus greatly exceeds Class I needs, as well as Class I and II needs combined. See USDA Market Summary and Utilization 2022 Annual Report, available at https://www.ams.usda.gov/sites/default/files/media/2022AnnualPriceandPoolReport.pdf.

The reserve supply of milk, i.e., that milk currently being used to make manufactured Class III and IV products, dwarfs the 30-35% of total milk level USDA has deemed adequate. See Milk in the New England and Other Marketing Areas; Decision on Proposed Amendments to Tentative Marketing Agreements and Orders, 58 FR 12634, 12646 (March 5, 1993) ("a reserve milk supply equal to 30 to 35 percent of the total milk in the market appears to be a reasonable reserve requirement.")

Accordingly, Class II differentials do ***not*** need to be raised because farmers need a financial incentive to produce more milk to meet unmet needs. Proposal 21 should be rejected on that ground alone.

This rational is squarely based in USDA's own thinking when in 1990 it held "national hearings" to consider a wide variety of proposals to amend various provisions of FMMOs. One set of proposals sought to increase the-then $0.10 Class II differential to either $0.50, $1.00 or $1.20.

The proponents of these Class II differential increases pointed to a variety of factors to try to convince USDA to increase Class II differentials. They argued that handlers "were willing to pay much more than the minimum Class II prices," with over-order prices for Class II milk "common throughout the country, often ranging from 50 cents to $1.00 or more over the Class III price." Milk In the New England and Other Marketing Areas; Decision on Proposed Amendments to Tentative Marketing Agreements and Orders, 58 Fed. Reg. 12634, 12652 (Mar. 5, 1993).[1] Proponents also contended that Class II products were claimed to "show greater strength and profitability relative to dairy products in general." Id. at 12653.

The proponents also sought to justify an increase in Class II differentials based on handlers' purported relative disincentive instead to use nonfat dry milk. Id. Proponents further claimed that Class II uses "should bear, along with fluid milk products, a reasonable part of the cost of attracting a sufficient supply of high-quality milk to the market." Id at 12652-53. In addition, they contended that "the cost of moving producer milk to Class II outlets far exceeds the order Class II differentials and that only through over-order prices can milk be attracted away from the more remunerative Class III outlets, which are usually located within the milkshed." Id. at 12653.

USDA rebuffed all of these arguments. USDA did acknowledge that "the present Class II prices under the orders substantially understate[d] the price that regulated handlers are paying for Class II milk," given that "handlers in most areas are paying much more than this to get a supply of milk for the soft product uses." Id. USDA further acknowledged that "handlers want a regular supply of Grade A milk for such uses, which

[1] Class III at that time included those products now found in Classes III and IV.

requires essentially all of the costly supply services associated with procuring milk for the Class I market," including "moving the milk long distances from the milkshed to the city processing plants and balancing milk supplies with demand," and that "handlers also often want milk delivered in a standardized form." USDA acknowledged that the current Class II differential "does not cover the cost of these services." Id.

Nonetheless, none of this was enough to convince USDA, which rejected all of the proposals to increase Class II differentials. USDA's reasoning was telling and remains highly relevant today. In rejecting the proposals to increase Class II differentials, USDA focused on the fact that over order premiums "in conjunction with Class I prices are generating adequate supplies of Grade A milk for both Class I and Class II uses." Specifically, "an analysis of supply and demand conditions under the orders indicates that there are adequate reserves of Class III milk to balance both Class I and Class II needs:" Accordingly, USDA "concluded that an increase in Class II differentials under all orders is not needed." Id.

All of the reasons USDA advanced then in rejecting Class II differential increases apply fully today. Today, as then, over order premiums "in conjunction with Class I prices are generating adequate supplies of Grade A milk for both Class I and Class II uses." Today, as then, "an analysis of supply and demand conditions under the orders indicates that there are adequate reserves of Class III [and IV] milk to balance both Class I and Class II needs." Accordingly, today, as then, "an increase in Class II differentials under all orders is not needed."

For sake of completeness, I will note that several months after USDA in March 1993 had rejected all of these proposals to increase Class II differentials, IDFA and NMPF

made a joint proposal addressing some technical glitches in the Class II formula. Although as noted the Class II differential was $0.10, the Class II price at the time contained certain floor and look back provisions that as a practical matter resulted in a Class II price equal to the then-Class III price plus $0.30 rather than $0.10. To simplify the process, IDFA and NMPF jointly proposed that the floor and look back provisions be eliminated, and the Class II differential be set at a flat $0.30. Milk In the New England and Other Marketing Areas; Notice of Hearing on Proposed Amendments to Tentative Marketing Agreements and Orders, 58 Fed. Reg. 67380, 67381 (Dec. 21, 1993).

USDA accepted and implemented this proposal. Milk in the New England and Other Marketing Areas; Recommended Decision and Opportunity To File Written Exceptions on Proposed Amendments to Tentative Marketing Agreements and to Orders, 59 Fed. Reg. 44074, 44075 (Aug. 26, 1994); Milk in the New England and Other Marketing Areas, Decision on Proposed Amendments to Marketing Agreements and to Orders, 59 Fed. Reg. 64524 (Dec. 14, 1994). But this change was not, as noted, a true increase in the preexisting Class II differential, but simply a revamping of the formula to preserve the existing effective differential.

B. Proposal 21 Would Cause Class II Handlers To Switch To Class IV Products, Reducing Farmer Revenues.

Let me begin by observing that a desire to set the Class II differential at a level that would not encourage the substitution of nonfat dry milk for farm milk in the production of Class II products should ***not*** be the driving force behind determining the appropriate level of the Class II differential. One would struggle to find a single example of someone (other than perhaps a manufacturer that desires to run their powder plants full to reduce marginal

drying costs) who actively chooses to buy milk or condensed skim and run it through a dryer only to re-wet those solids immediately to avoid paying the Class II differential.

If the goal were simply to maximize regulated producer prices this might be a reason to raise the differential, but the stated goal of regulated pricing has always been to provide for minimum pricing and attract an adequate supply of milk for fluid consumption, rather than set regulated prices as binding market prices (the same reasoning that leads everyone to agrees that make allowances need to be adjusted).

This highlights that there is no good justification for a specific relationship between Class II and Class IV prices based on replacement of farm milk with dried solids, but rather that this relationship should be viewed as at most an upper bounds on where the Class II differential can be set.

All of that being said, Proposal 21 is deeply flawed even if one focuses solely on concerns over the substitution of nonfat dry milk. This is because the proposal would greatly incentivize the substitution of Class IV dry milk products for farm milk in the production of Class II products.

The following chart set forth the economics of making Class II product using: (a) purchased nonfat dry milk, versus (b) purchased farm milk at the current Class II differential of $0.70, versus (c) purchased farm milk at the proposed Class II differential of $1.56. I have used the average actual 2023 NDPSR advanced nonfat dry milk and Federal Order Class II nonfat solids prices to provide for consistent timing of comparisons and actual average delivery costs and service charges based upon data received from actual market participants.

2023 Market Based Cost Comparison for Delivered Class II Skim Solids

Purchased Nonfat Dry Milk		***Value***	***Description***
NDPSR ADVANCE NONFAT DRY MILK	$	1.2181	2023 Monthly NDPSR ADVANCE Average Price
+ Delivery Cost	$	0.0375	Average 2023 Bid Premium and Hauling for Full Loads
Delivered NFDM per Pound	$	1.2556	Advance Price + Delivery Cost
Delivered Nonfat Solids Cost per Pound	**$**	**1.2944**	Delivered NDM per Pound ÷ 97% Solids

Farm Milk, Current Class II Differential		***Value***	***Description***
NDPSR ADVANCE NONFAT DRY MILK	$	1.2181	2023 Monthly NDPSR ADVANCE Average Price
Class IV SNF Per Pound	$	1.0398	(NDPSR NDM-0.1678)*0.99
Current Class II Differential	$	0.7000	
Class II SNF per CWT	$	10.06	Advanced Class IV SNF * 9 + $0.70
+ Delivered Service Charge Class II	$	1.3000	Average Class II Service Charge
Delivered Class II Skim per CWT	$	11.36	Class IV Skim + Class II Differential + Delivered Service Charge
Delivered Nonfat Solids Cost per Pound	**$**	**1.2620**	Delivered Skim per Cwt / 9 Pounds Yield/Cwt

Farm Milk, Proposed Class II Differential		***Value***	***Description***
NDPSR ADVANCE NONFAT DRY MILK	$	1.2181	2023 Monthly NDPSR ADVANCE Average Price
Class IV SNF Per Pound	$	1.0398	(NDPSR NDM-0.1678)*0.99
Proposal 21's Proposed Class II Differential	$	1.5600	
Class II SNF per CWT	$	10.92	Advanced Class IV SNF * 9 + $1.56
+ Delivered Service Charge Class II	$	1.3000	Average Class II Service Charge
Delivered Class II Skim per CWT	$	12.22	Class IV Skim + Class II Differential + Delivered Service Charge
Delivered Nonfat Solids Cost per Pound	**$**	**1.3576**	Delivered Skim per Cwt / 9 Pounds Yield/Cwt

Source: USDA Announcement of Advanced Prices and Pricing Factors, November 23, 2023

This analysis shows that under the current Class II differential of $0.70, it is on average cheaper for a Class II processor to use farm milk, priced at the Class II price, to make its products. Specifically, the delivered nonfat solids cost per pound using Class II farm milk is on average $1.2620, as compared to a cost of $1.2944 using nonfat dry milk.

However, were the Class II differential to be increased to $1.56 as Proposal 21 suggests, the delivered nonfat solids cost per pound using Class II farm milk would on average increase to $1.3576, 6.32 cents higher than the cost of $1.2944 using nonfat dry milk. This would incentivize Class II processors materially to increase their use of nonfat dry milk, a Class IV product, rather than Class II farm milk.

In fact, in 111 out of 134 months since June 2012 (82.8% of the time),a processor buying a six month supply of nonfat dry milk would have had a lower cost than if it had bought Class II nonfat solids as priced in Proposal 21.

Indeed, the incentives can actually be even greater. If the processor had bought the six month supply of nonfat dry milk in the most advantageous month during this time period, the cost advantage over Class II nonfat solids would have been a little more than $0.21 per pound, an enormous savings. These calculations are set forth in Appendix 1.

I am not suggesting that every Class II processor would switch to Class IV nonfat dry milk for 100% of their needs. Some processors consider farm milk to provide a better tasting product. Others are far less convinced. But the cost disparity resulting from Proposal 21 would predictably cause many Class II processors to make the change.

As noted in the testimony of Tim Galloway (Hearing Exh. 439 (IDFA Exh. 63) at p. 2, when the Class II price was tied to Class III cheese back in the 1990's, many retail and ice cream mix manufacturers switched to dry dairy solids and anhydrous milkfat due to the vast discrepancy in price between Class II and Class III. Similarly, while one of the very largest U.S. candy makers has stuck with using farmer milk, another switched to dry dairy solids decades ago, due to cost considerations; both companies continue to be successful. I worked for a consulting firm in the early 1990's when the prices for Class II was linked to the price of Class III. One of my duties was to advise a large Class II manufacturer when to buy nonfat dry milk vs Class II Condensed milk, in an effort to minimize cost. It saved money for the buyer, while at the same time made production planning for the Class II condensed skim supplier more difficult. The Class II supplier was losing sales and losing predictability.

I know from personal experience from my time at Kroger that Class II manufacturers already commonly maintain a prepurchased inventory of nonfat dry milk, obtained if possible when nonfat dry milk market prices are low. They can use those solids anytime they provide a cheaper source of solids than buying Class II milk. Again, it is convenient for processors to do this because nonfat dry milk can be stored without refrigeration in a dry location and used for at least a year after purchase. In fact, given its storability, nonfat dry milk is easier to manage than farm milk, which must be kept refrigerated and has a short shelf life.

In fact, it is common to obtain and maintain a prepurchased inventory of nonfat dry milk without necessarily knowing what specific Class II product will be manufactured from it. I am personally aware of nonfat dry milk being used in extensively in yogurt, cottage cheese ice cream and confections, mostly chocolate candy.

The circumstances in which this occurs are increased by the fact that Class II and Class IV are priced on a different schedule, with Class II being priced on an advanced basis and Class IV after the fact. This leads to price disparities between Class IV powder and Class II farm milk that can make switching economically advantageous. The circumstances in which this would occur would be vastly increased were the economics to be changed as Proposal 21 indicates.

C. Proposal 21 Also Creates A Significant Disadvantage For Class I Processors That Also Manufacture Class II Products In Their Class I Distributing Plant

There is a growing number of large stand-alone plants making a growing share of the variety of Class II products sold today. Because these plants are not required to be

pooled, they can take full advantage of the lower skim solids price that nonfat dry milk would provide compared to Class II skim solids under Proposal 21.

However this benefit would not apply to all Class II processors, leading to regulation-based competitive disadvantages. Class I distributing plants that make Class II products cannot depool. And, they cannot take advantage of the lower priced nonfat dry milk, because they will be required to account to the pool as if they had used fresh milk to make the Class II products. The 6.6 cents (or more) advantage that the free-standing Class II plant would have over the Class I plant making Class II products would be a very significant competitive advantage. We have heard how Class I price contracts can be awarded based on differences of small fractions of a cent. From my experience this is also true for Class II products.

D. Class II Is A Uniquely Dynamic Market That Is Functioning Well And Does Not Warrant A Higher Differential.

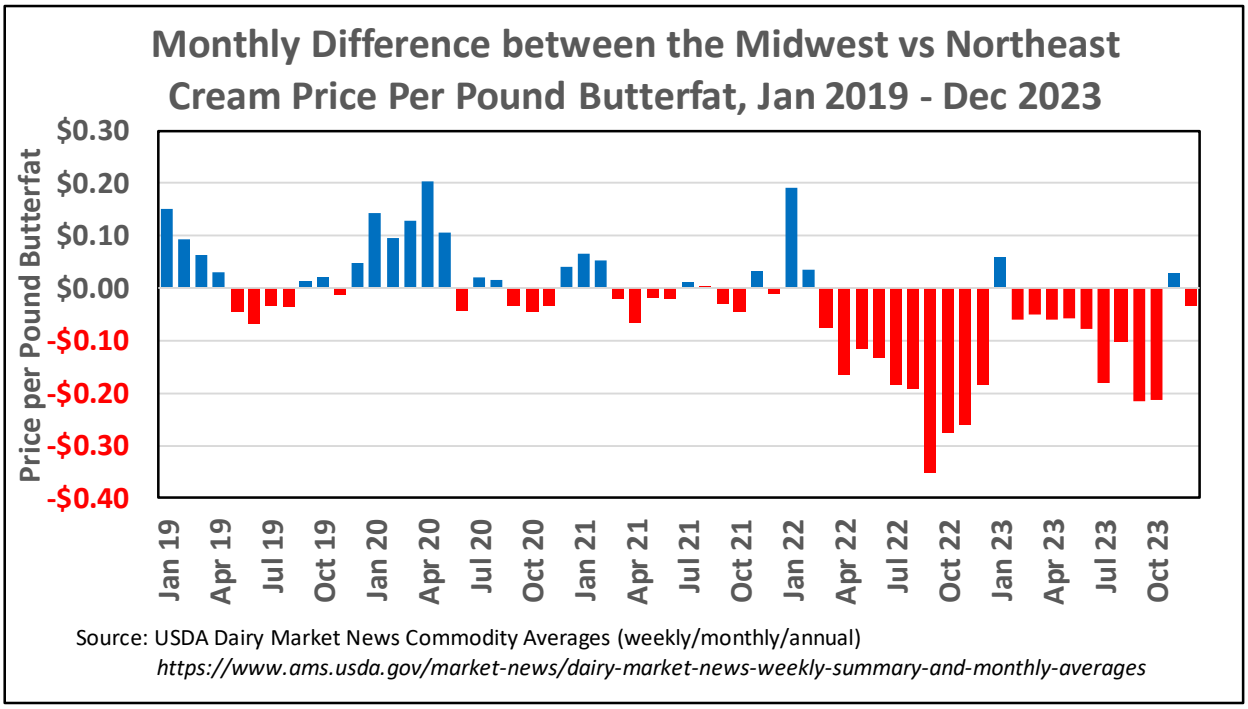
There are additional considerations weighing against an increase in the Class II differentials.

Class II is unique in several respects. It is the smallest class. Its price is based off of the supply and demand for another class (Class IV) whose supply and demand does not match that of Class II products. Class II products containing skim milk solids can be manufactured with either fresh milk and dried milk products like nonfat dry milk, and buttermilk, both of which are Class IV products. Dry whey may also be used in some Class II products when the price spread between Class II nonfat solids and alternative solids sources is wide enough.

Furthermore, dairy farmers are not incentivized to serve Class II needs in the way they are incentivized to serve Class I needs. A farmer is not required to serve Class II needs as a prerequisite to having his or her milk pooled and sharing in the pool draw. Finally, unlike Class I milk, the Class II milk price is uniform throughout the federal order system, even though the milk supply available to serve Class II needs varies greatly by location and temporally depending upon local supply conditions.

All of these unique attributes dictate that Class II regulated pricing provide maximum flexibility to ensure that market forces can work throughout the FMMO system to match supply with needs, regardless of the wide variability in milk supply conditions either geographically or seasonally. That system is currently working very well and should not be changed.

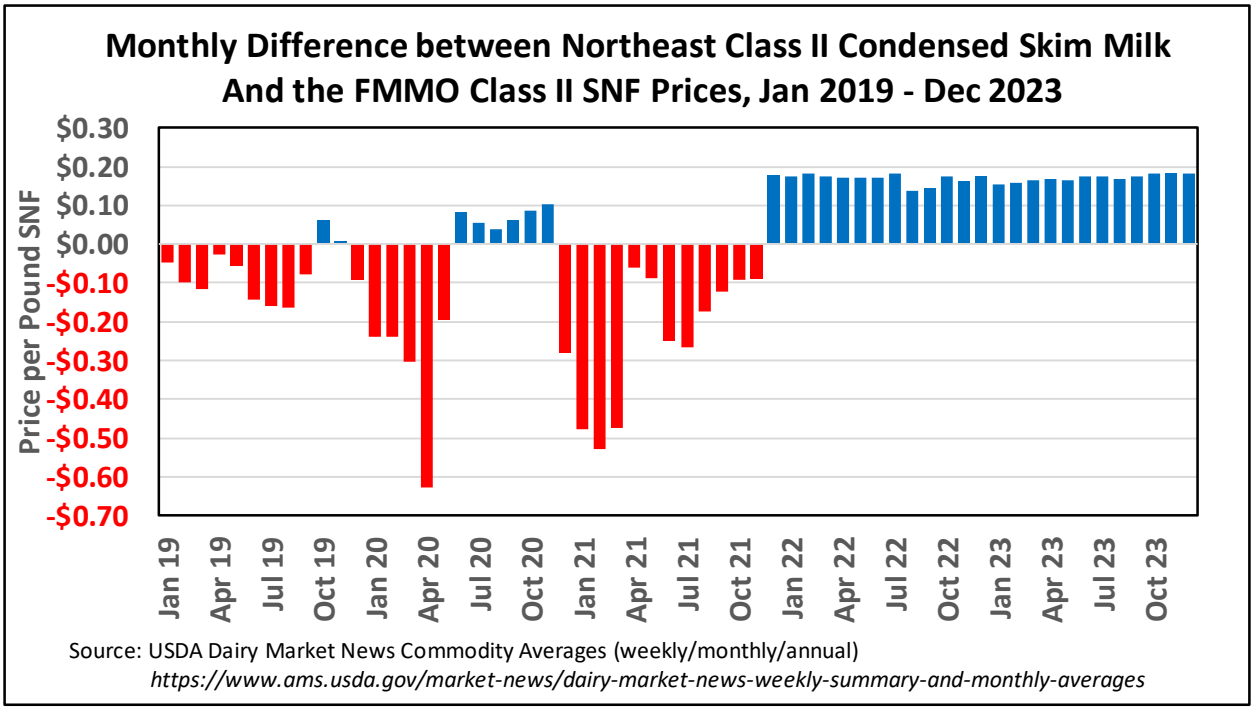
In fact, the market has done an admirable job of developing a variable Class II price surface across time and space through variable premiums layered on top of the regulated Class II price. Only a dynamic marketplace can fill that role. The dynamism in



the market is exemplified by the regional variations in the market price for Class II cream over the past five years, based on prices reported in USDA's AMS Dairy Market News, included in Appendix 2 and displayed in the chart below:

As shown, the relationship of Class II cream values between the Midwest and the Northeast varied substantially in 2022 from month to month, and from more than 35 cents lower to more than 20 cents higher, all as established by supply and demand factors. The two regional cream prices adjusted, often independently, as necessary to balance supplies.

Like cream, condensed skim milk, an intermediate dairy ingredient often used in Class II products, is subject to significant market forces outside of the small Class II market, particularly shifts in supply relative to demand:



While tighter supplies of skim milk solids have helped stabilize condensed skim costs over the past two years, earlier periods of surplus milk supplies, well before the COVID epidemic, created significant negative margins on Class II condensed skim sales – a factor caused by imbalances of manufacturing milk and completely independent of the Class II regulated differential. Clearly the market should, and will, determine the ultimate price, and not the regulated minimum.

Appendix 1: Comparison of Current NDPSR NFDM Price with NDPSR 6-Month Forward Average Advanced NFDM Price, With Current and Proposal 21 Differentials, June 2012 - July 2023

							Current Month Delivered Cost per Pound SNF			Class II SNF Delivered Cost vs. Delivered NFDM		Average Current Delivered Cost per Pound SNF for 6 Months Forward			6-Month Pre-Purchased NFDM vs Current Delivered Markets on a Per-Pound SNF Basis		
FMMO Month	NFDM Monthly Average Price	SNF cost per Pound from NFDM FOB Supplier	Advance NFDM Purchase 6 Month Total Carry Cost	SNF Cost for 6-Month Pre-Purchased NFDM FOB Supplier	Current Month Announced Class II SNF	Current Month Proposal 21 Class II SNF	SNF Cost for Delivered NFDM for Current Month	Class II SNF Delivered Cost @ Current II Differential	Class II SNF Delivered Cost @ Proposal 21 Differential	Class II SNF Delivered Cost @ Current II Differential	Class II SNF Delivered Cost @ Proposal 21 Differential	SNF Cost for 6-Month Forward Avg. NDPSR NFDM	6- Month Forward Avg. @ CURRENT Class II SNF Price	6- Month Forward Avg. @ PROP 21 Class II SNF Price	Pre-Purchased NFDM vs. Current NFDM	Pre-Purchased NFDM vs Delivered Class II SNF with Current Make	Pre-Purchased NFDM vs Delivered Class II SNF with Prop 21 Make
Jun-12	$1.1023	$1.1364	$0.0300	$1.1673	$1.0467	$1.1423	$1.1751	$1.1911	$1.2867	$0.0161	$0.1116	$1.4236	$1.2902	$1.3858	-$0.2485	-$0.1151	-$0.2107
Jul-12	$1.1744	$1.2107	$0.0300	$1.2416	$1.0011	$1.0967	$1.2494	$1.1455	$1.2411	-$0.1038	-$0.0083	$1.4985	$1.3504	$1.4459	-$0.2491	-$0.1010	-$0.1966
Aug-12	$1.2543	$1.2931	$0.0300	$1.3240	$1.0589	$1.1545	$1.3318	$1.2033	$1.2989	-$0.1284	-$0.0329	$1.5648	$1.4235	$1.5191	-$0.2330	-$0.0918	-$0.1873
Sep-12	$1.3768	$1.4194	$0.0300	$1.4503	$1.1511	$1.2467	$1.4580	$1.2955	$1.3911	-$0.1625	-$0.0669	$1.6166	$1.4898	$1.5854	-$0.1586	-$0.0318	-$0.1273
Oct-12	$1.4636	$1.5089	$0.0300	$1.5398	$1.2689	$1.3645	$1.5475	$1.4133	$1.5089	-$0.1342	-$0.0386	$1.6454	$1.5413	$1.6369	-$0.0938	$0.0062	-$0.0838
Nov-12	$1.5143	$1.5611	$0.0300	$1.5921	$1.3478	$1.4434	$1.5998	$1.4922	$1.5878	-$0.1075	-$0.0120	$1.6530	$1.5663	$1.6619	-$0.0532	$0.0335	-$0.0621
Dec-12	$1.5384	$1.5860	$0.0300	$1.6169	$1.4078	$1.5034	$1.6246	$1.5522	$1.6478	-$0.0724	$0.0232	$1.6741	$1.5748	$1.6704	-$0.0495	$0.0498	-$0.0457
Jan-13	$1.5601	$1.6084	$0.0300	$1.6393	$1.4400	$1.5356	$1.6470	$1.5844	$1.6800	-$0.0626	$0.0330	$1.6998	$1.5956	$1.6911	-$0.0528	$0.0514	-$0.0441
Feb-13	$1.5559	$1.6040	$0.0300	$1.6349	$1.4567	$1.5523	$1.6427	$1.6011	$1.6967	-$0.0415	$0.0540	$1.7285	$1.6185	$1.7341	-$0.0858	$0.0242	-$0.0714
Mar-13	$1.5208	$1.5678	$0.0300	$1.5988	$1.4600	$1.5556	$1.6065	$1.6044	$1.7000	-$0.0021	$0.0935	$1.7654	$1.6437	$1.7393	-$0.1589	-$0.0372	-$0.1328
Apr-13	$1.5312	$1.5786	$0.0300	$1.6095	$1.4189	$1.5145	$1.6172	$1.5633	$1.6589	-$0.0539	$0.0417	$1.8148	$1.6774	$1.7730	-$0.1976	-$0.0602	-$0.1558
May-13	$1.6374	$1.6880	$0.0300	$1.7190	$1.3989	$1.4945	$1.7267	$1.5433	$1.6389	-$0.1834	-$0.0878	$1.8673	$1.7233	$1.8189	-$0.1406	$0.0034	-$0.0922
Jun-13	$1.6878	$1.7400	$0.0300	$1.7709	$1.5322	$1.6278	$1.7787	$1.6766	$1.7722	-$0.1020	-$0.0065	$1.9106	$1.7783	$1.8739	-$0.1319	$0.0003	-$0.0952
Jul-13	$1.7272	$1.7806	$0.0300	$1.8115	$1.5778	$1.6734	$1.8193	$1.7222	$1.8178	-$0.0970	-$0.0015	$1.9563	$1.8194	$1.9150	-$0.1370	-$0.0002	-$0.0957
Aug-13	$1.7706	$1.8254	$0.0300	$1.8563	$1.6078	$1.7034	$1.8640	$1.7522	$1.8478	-$0.1118	-$0.0162	$2.0089	$1.8622	$1.9578	-$0.1449	$0.0018	-$0.0937
Sep-13	$1.8085	$1.8644	$0.0300	$1.8954	$1.6622	$1.7578	$1.9031	$1.8066	$1.9022	-$0.0964	-$0.0009	$2.0618	$1.9141	$2.0096	-$0.1587	-$0.0110	-$0.1065
Oct-13	$1.8366	$1.8934	$0.0300	$1.9243	$1.6944	$1.7900	$1.9321	$1.8388	$1.9344	-$0.0932	$0.0023	$2.1101	$1.9642	$2.0598	-$0.1780	-$0.0322	-$0.1277
Nov-13	$1.8892	$1.9476	$0.0300	$1.9786	$1.7289	$1.8245	$1.9863	$1.8793	$1.9689	-$0.1129	-$0.0174	$2.1414	$2.0137	$2.1093	-$0.1551	-$0.0274	-$0.1230
Dec-13	$1.9537	$2.0141	$0.0300	$2.0451	$1.7789	$1.8745	$2.0528	$1.9233	$2.0189	-$0.1294	-$0.0339	$2.1393	$2.0415	$2.1370	-$0.0865	$0.0513	-$0.0842
Jan-14	$2.0335	$2.0964	$0.0300	$2.1279	$1.8344	$1.9300	$2.1351	$1.9788	$2.0744	-$0.1562	-$0.0607	$2.1238	$2.0400	$2.1356	$0.0113	$0.0951	-$0.0005
Feb-14	$2.0783	$2.1426	$0.0300	$2.1735	$1.9189	$2.0145	$2.1812	$2.0633	$2.1589	-$0.1179	-$0.0223	$2.0942	$2.0252	$2.1208	$0.0870	$0.1560	$0.0605
Mar-14	$2.0897	$2.1543	$0.0300	$2.1853	$1.9633	$2.0589	$2.1930	$2.1077	$2.2033	-$0.0852	$0.0103	$2.0445	$2.0002	$2.0958	$0.1485	$0.1928	$0.0972
Apr-14	$2.0191	$2.0815	$0.0300	$2.1125	$1.9911	$2.0867	$2.1202	$2.1355	$2.2311	$0.0153	$0.1109	$1.9383	$1.9556	$2.0511	$0.1819	$0.1646	$0.0691
May-14	$1.8768	$1.9348	$0.0300	$1.9658	$1.8956	$1.9912	$1.9735	$2.0400	$2.1356	$0.0665	$0.1621	$1.8474	$1.8526	$1.9482	$0.1261	$0.1209	$0.0253
Jun-14	$1.8633	$1.9209	$0.0300	$1.9519	$1.7700	$1.8656	$1.9596	$1.9144	$2.0100	-$0.0451	$0.0504	$1.7638	$1.7704	$1.8659	$0.1958	$0.1892	$0.0937
Jul-14	$1.8617	$1.9193	$0.0300	$1.9502	$1.7456	$1.8412	$1.9579	$1.8900	$1.9856	-$0.0679	$0.0277	$1.6593	$1.7002	$1.7958	$0.2986	$0.2577	$0.1622
Aug-14	$1.7887	$1.8440	$0.0300	$1.8749	$1.7689	$1.8645	$1.8827	$1.9133	$2.0089	$0.0307	$0.1262	$1.5148	$1.6061	$1.7017	$0.3679	$0.2766	$0.1810
Sep-14	$1.4718	$1.5173	$0.0300	$1.5482	$1.6956	$1.7912	$1.5560	$1.8400	$1.9356	$0.2841	$0.3796	$1.3845	$1.4657	$1.5613	$0.1714	$0.0902	-$0.0053
Oct-14	$1.4900	$1.5361	$0.0300	$1.5670	$1.3733	$1.4689	$1.5747	$1.5177	$1.6133	-$0.0570	$0.0386	$1.3072	$1.3370	$1.4326	$0.2675	$0.2377	$0.1422
Nov-14	$1.3902	$1.4332	$0.0300	$1.4641	$1.4022	$1.4978	$1.4719	$1.5466	$1.6422	$0.0748	$0.1703	$1.2176	$1.2680	$1.3635	$0.2543	$0.2039	$0.1083
Dec-14	$1.2554	$1.2942	$0.0300	$1.3252	$1.3489	$1.4445	$1.3329	$1.4933	$1.5889	$0.1605	$0.2560	$1.1413	$1.1796	$1.2752	$0.1916	$0.1533	$0.0577
Jan-15	$1.0202	$1.0518	$0.0300	$1.0827	$1.1811	$1.2767	$1.0904	$1.3255	$1.4211	$0.2351	$0.3307	$1.0851	$1.0967	$1.1922	$0.0053	-$0.0062	-$0.1018
Feb-15	$1.0308	$1.0627	$0.0300	$1.0936	$0.9267	$1.0223	$1.1013	$1.0711	$1.1667	-$0.0302	$0.0654	$1.0536	$1.0396	$1.1352	$0.0478	$0.0617	-$0.0338
Mar-15	$1.0217	$1.0533	$0.0300	$1.0842	$0.9233	$1.0189	$1.0920	$1.0677	$1.1633	-$0.0242	$0.0713	$1.0043	$1.0115	$1.1070	$0.0876	$0.0805	-$0.0151
Apr-15	$0.9684	$0.9984	$0.0300	$1.0293	$0.9589	$1.0545	$1.0170	$1.1083	$1.1989	$0.0663	$0.1619	$0.9664	$0.9670	$1.0626	$0.0706	$0.0700	-$0.0256
May-15	$0.9464	$0.9757	$0.0300	$1.0066	$0.8722	$0.9678	$1.0143	$1.0166	$1.1122	$0.0023	$0.0979	$0.9538	$0.9269	$1.0224	$0.0605	$0.0875	-$0.0081
Jun-15	$0.9283	$0.9570	$0.0300	$0.9879	$0.8511	$0.9467	$0.9957	$0.9955	$1.0911	-$0.0001	$0.0954	$0.9350	$0.9176	$1.0132	$0.0607	$0.0781	-$0.0175
Jul-15	$0.8366	$0.8625	$0.0300	$0.8934	$0.8389	$0.9345	$0.9011	$0.9833	$1.0789	$0.0822	$0.1778	$0.9111	$0.9008	$0.9963	-$0.0100	$0.0004	-$0.0952
Aug-15	$0.7443	$0.7673	$0.0300	$0.7982	$0.7578	$0.8534	$0.8060	$0.9022	$0.9978	$0.0963	$0.1918	$0.9010	$0.8778	$0.9734	-$0.0950	-$0.0718	-$0.1674
Sep-15	$0.8007	$0.8255	$0.0300	$0.8564	$0.6567	$0.7523	$0.8641	$0.8051	$0.8967	-$0.0590	$0.0326	$0.9052	$0.8658	$0.9613	-$0.0411	-$0.0016	-$0.0972
Oct-15	$0.8951	$0.9228	$0.0300	$0.9537	$0.7178	$0.8134	$0.9614	$0.8622	$0.9578	-$0.0992	-$0.0036	$0.8969	$0.8683	$0.9639	$0.0646	$0.0931	-$0.0025
Nov-15	$0.8372	$0.8631	$0.0300	$0.8940	$0.8167	$0.9123	$0.9018	$0.9611	$1.0567	$0.0594	$0.1549	$0.8686	$0.8578	$0.9533	$0.0331	$0.0440	-$0.0516
Dec-15	$0.7893	$0.8137	$0.0300	$0.8446	$0.7500	$0.8456	$0.8524	$0.8944	$0.9900	$0.0421	$0.1376	$0.8555	$0.8274	$0.9230	-$0.0031	$0.0250	-$0.0706
Jan-16	$0.7776	$0.8016	$0.0300	$0.8326	$0.7011	$0.7967	$0.8403	$0.8455	$0.9411	$0.0052	$0.1008	$0.8554	$0.8109	$0.9065	-$0.0151	$0.0294	-$0.0662
Feb-16	$0.7689	$0.7927	$0.0300	$0.8236	$0.6856	$0.7812	$0.8313	$0.8300	$0.9256	-$0.0013	$0.0943	$0.8635	$0.8102	$0.9057	-$0.0342	$0.0212	-$0.0744
Mar-16	$0.7522	$0.7755	$0.0300	$0.8064	$0.6722	$0.7678	$0.8141	$0.8166	$0.9122	$0.0025	$0.0981	$0.8809	$0.8202	$0.9157	-$0.0668	-$0.0061	-$0.1016
Apr-16	$0.7307	$0.7533	$0.0300	$0.7842	$0.6544	$0.7500	$0.7920	$0.7988	$0.8944	$0.0069	$0.1024	$0.9037	$0.8339	$0.9294	-$0.1118	-$0.0419	-$0.1375
May-16	$0.7607	$0.7842	$0.0300	$0.8152	$0.6344	$0.7300	$0.8229	$0.7788	$0.8744	-$0.0440	$0.0515	$0.9366	$0.8570	$0.9526	-$0.1137	-$0.0841	-$0.1297
Jun-16	$0.7888	$0.8132	$0.0300	$0.8441	$0.6511	$0.7467	$0.8519	$0.7955	$0.8911	-$0.0563	$0.0392	$0.9626	$0.8896	$0.9852	-$0.1107	-$0.0778	-$0.1333
Jul-16	$0.8363	$0.8622	$0.0300	$0.8931	$0.6967	$0.7923	$0.9008	$0.8411	$0.9367	-$0.0597	$0.0359	$0.9916	$0.9167	$1.0122	-$0.0908	-$0.0558	-$0.1114
Aug-16	$0.8588	$0.8854	$0.0300	$0.9163	$0.7456	$0.8412	$0.9240	$0.8900	$0.9856	-$0.0340	$0.0616	$1.0237	$0.9444	$1.0400	-$0.0997	-$0.0204	-$0.1160
Sep-16	$0.8847	$0.9121	$0.0300	$0.9430	$0.7544	$0.8500	$0.9507	$0.8988	$0.9944	-$0.0519	$0.0437	$1.0467	$0.9737	$1.0692	-$0.0960	-$0.0230	-$0.1185
Oct-16	$0.9222	$0.9507	$0.0300	$0.9816	$0.7933	$0.8889	$0.9894	$0.9377	$1.0333	-$0.0516	$0.0439	$1.0406	$0.9961	$1.0917	-$0.0512	-$0.0067	-$0.1023
Nov-16	$0.9119	$0.9401	$0.0300	$0.9710	$0.8300	$0.9256	$0.9788	$0.9744	$1.0700	-$0.0043	$0.0912	$1.0263	$0.9894	$1.0850	-$0.0475	-$0.0107	-$0.1062
Dec-16	$0.9579	$0.9875	$0.0300	$1.0185	$0.8133	$0.9089	$1.0262	$0.9577	$1.0533	-$0.0684	$0.0271	$1.0195	$0.9733	$1.0689	$0.0071	$0.0529	-$0.0427

Appendix 1: Comparison of Current NDPSR NFDM Price with NDPSR 6-Month Forward Average Advanced NFDM Price, With Current and Proposal 21 Differentials, June 2012 - July 2023

							Current Month Delivered Cost per Pound SNF			Class II SNF Delivered Cost vs. Delivered NFDM		Average Current Delivered Cost per Pound SNF for 6 Months Forward			6-Month Pre-Purchased NFDM vs Current Delivered Markets on a Per-Pound SNF Basis		
FMMO	NFDM Monthly Average Price	SNF cost per Pound from NFDM FOB Supplier	Purchase 6 Month Total Carry Cost	SNF Cost for 6-Month Pre-Purchased NFDM FOB Supplier	Current Month Announced Class II SNF	Current Month Proposal 21 Class II SNF	SNF Cost for Delivered NFDM for Current Month	Class II SNF Delivered Cost @ Current II Differential	Class II SNF Delivered Cost @ Proposal 21 Differential	Class II SNF Delivered Cost @ Current II Differential	Class II SNF Delivered Cost @ Proposal 21 Differential	SNF Cost for 6-Month Forward Avg. NDPSR NFDM	6- Month Forward Avg. @ CURRENT Class II SNF Price	6- Month Forward Avg. @ PROP 21 Class II SNF Price	Pre-Purchased NFDM vs. Current NFDM	Pre-Purchased NFDM vs Delivered Class II SNF with Current Make	Pre-Purchased NFDM vs Delivered Class II SNF with Prop 21 Make
Jun-12	$1.1023	$1.1364	$0.0300	$1.1673	$1.0467	$1.1423	$1.1751	$1.1911	$1.2867	$0.0161	$0.1116	$1.4236	$1.2902	$1.3858	-$0.2485	-$0.1151	-$0.2107
Jul-12	$1.1744	$1.2107	$0.0300	$1.2416	$1.0011	$1.0967	$1.2494	$1.1455	$1.2411	-$0.1038	-$0.0083	$1.4985	$1.3504	$1.4459	-$0.2491	-$0.1010	-$0.1966
Aug-12	$1.2543	$1.2931	$0.0300	$1.3240	$1.0589	$1.1545	$1.3318	$1.2033	$1.2989	-$0.1284	-$0.0329	$1.5648	$1.4235	$1.5191	-$0.2330	-$0.0918	-$0.1873
Sep-12	$1.3768	$1.4194	$0.0300	$1.4503	$1.1511	$1.2467	$1.4580	$1.2955	$1.3911	-$0.1625	-$0.0669	$1.6166	$1.4898	$1.5854	-$0.1586	-$0.0318	-$0.1273
Oct-12	$1.4636	$1.5089	$0.0300	$1.5398	$1.2689	$1.3645	$1.5475	$1.4133	$1.5089	-$0.1342	-$0.0386	$1.6414	$1.5413	$1.6369	-$0.0938	$0.0062	-$0.0893
Nov-12	$1.5143	$1.5611	$0.0300	$1.5921	$1.3478	$1.4434	$1.5998	$1.4922	$1.5878	-$0.1075	-$0.0120	$1.6530	$1.5663	$1.6619	-$0.0532	$0.0335	-$0.0621
Dec-12	$1.5384	$1.5860	$0.0300	$1.6169	$1.4078	$1.5034	$1.6246	$1.5522	$1.6478	-$0.0724	$0.0232	$1.6741	$1.5748	$1.6704	-$0.0495	$0.0498	-$0.0457
Jan-13	$1.5601	$1.6084	$0.0300	$1.6393	$1.4400	$1.5356	$1.6470	$1.5844	$1.6800	-$0.0626	$0.0330	$1.6998	$1.5956	$1.6911	-$0.0528	$0.0514	-$0.0441
Feb-13	$1.5559	$1.6040	$0.0300	$1.6349	$1.4567	$1.5523	$1.6427	$1.6011	$1.6967	-$0.0415	$0.0540	$1.7285	$1.6185	$1.7141	-$0.0858	$0.0242	-$0.0714
Mar-13	$1.5208	$1.5678	$0.0300	$1.5988	$1.4600	$1.5556	$1.6065	$1.6044	$1.7000	-$0.0021	$0.0935	$1.7654	$1.6437	$1.7393	-$0.1589	-$0.0372	-$0.1328
Apr-13	$1.5312	$1.5786	$0.0300	$1.6095	$1.4189	$1.5145	$1.6172	$1.5633	$1.6589	-$0.0539	$0.0417	$1.8148	$1.6774	$1.7730	-$0.1976	-$0.0602	-$0.1558
May-13	$1.6374	$1.6880	$0.0300	$1.7190	$1.3989	$1.4945	$1.7267	$1.5433	$1.6389	-$0.1834	-$0.0878	$1.8673	$1.7233	$1.8189	-$0.1406	$0.0034	-$0.0922
Jun-13	$1.6878	$1.7400	$0.0300	$1.7709	$1.5322	$1.6278	$1.7787	$1.6766	$1.7722	-$0.1020	-$0.0065	$1.9106	$1.7783	$1.8739	-$0.1319	$0.0003	-$0.0952
Jul-13	$1.7272	$1.7806	$0.0300	$1.8115	$1.5778	$1.6734	$1.8193	$1.7222	$1.8178	-$0.0970	-$0.0015	$1.9563	$1.8194	$1.9150	-$0.1370	-$0.0002	-$0.0957
Aug-13	$1.7706	$1.8254	$0.0300	$1.8563	$1.6078	$1.7034	$1.8640	$1.7522	$1.8478	-$0.1118	-$0.0162	$2.0089	$1.8622	$1.9578	-$0.1449	$0.0018	-$0.0937
Sep-13	$1.8085	$1.8644	$0.0300	$1.8954	$1.6622	$1.7578	$1.9031	$1.8066	$1.9022	-$0.0964	-$0.0009	$2.0618	$1.9141	$2.0096	-$0.1587	-$0.0110	-$0.1065
Oct-13	$1.8366	$1.8934	$0.0300	$1.9243	$1.6944	$1.7900	$1.9321	$1.8388	$1.9344	-$0.0932	$0.0023	$2.1101	$1.9642	$2.0598	-$0.1780	-$0.0322	-$0.1277
Nov-13	$1.8892	$1.9476	$0.0300	$1.9786	$1.7289	$1.8245	$1.9863	$1.8733	$1.9689	-$0.1129	-$0.0174	$2.1414	$2.0137	$2.1093	-$0.1551	-$0.0274	-$0.1230
Dec-13	$1.9537	$2.0141	$0.0300	$2.0451	$1.7789	$1.8745	$2.0528	$1.9233	$2.0189	-$0.1294	-$0.0339	$2.1393	$2.0415	$2.1370	-$0.0865	$0.0113	-$0.0842
Jan-14	$2.0335	$2.0964	$0.0300	$2.1273	$1.8344	$1.9300	$2.1351	$1.9788	$2.0744	-$0.1562	-$0.0607	$2.1238	$2.0400	$2.1356	$0.0113	$0.0951	-$0.0005
Feb-14	$2.0783	$2.1426	$0.0300	$2.1735	$1.9189	$2.0145	$2.1812	$2.0633	$2.1589	-$0.1179	-$0.0223	$2.0942	$2.0252	$2.1208	$0.0870	$0.1560	$0.0605
Mar-14	$2.0897	$2.1543	$0.0300	$2.1853	$1.9633	$2.0589	$2.1930	$2.1077	$2.2033	-$0.0852	$0.0103	$2.0445	$2.0002	$2.0958	$0.1485	$0.1928	$0.0972
Apr-14	$2.0191	$2.0815	$0.0300	$2.1125	$1.9911	$2.0867	$2.1202	$2.1355	$2.2311	$0.0153	$0.1109	$1.9383	$1.9556	$2.0511	$0.1819	$0.1646	$0.0691
May-14	$1.8768	$1.9348	$0.0300	$1.9658	$1.8956	$1.9912	$1.9735	$2.0400	$2.1356	$0.0665	$0.1621	$1.8474	$1.8526	$1.9482	$0.1261	$0.1209	$0.0253
Jun-14	$1.8633	$1.9209	$0.0300	$1.9519	$1.7700	$1.8656	$1.9596	$1.9144	$2.0100	-$0.0451	$0.0504	$1.7638	$1.7704	$1.8659	$0.1958	$0.1892	$0.0937
Jul-14	$1.8617	$1.9193	$0.0300	$1.9502	$1.7456	$1.8412	$1.9579	$1.8900	$1.9856	-$0.0679	$0.0277	$1.6593	$1.7002	$1.7958	$0.2986	$0.2577	$0.1622
Aug-14	$1.7887	$1.8440	$0.0300	$1.8749	$1.7689	$1.8645	$1.8827	$1.9133	$2.0089	$0.0307	$0.1262	$1.5148	$1.6061	$1.7017	$0.3679	$0.2766	$0.1810
Sep-14	$1.4718	$1.5173	$0.0300	$1.5482	$1.6956	$1.7912	$1.5560	$1.8400	$1.9356	$0.2841	$0.3796	$1.3845	$1.4657	$1.5613	$0.1714	$0.0902	-$0.0053
Oct-14	$1.4900	$1.5361	$0.0300	$1.5670	$1.3733	$1.4689	$1.5747	$1.5177	$1.6133	-$0.0570	$0.0386	$1.3072	$1.3370	$1.4326	$0.2675	$0.2377	$0.1422
Nov-14	$1.3902	$1.4332	$0.0300	$1.4641	$1.4022	$1.4978	$1.4719	$1.5466	$1.6422	$0.0748	$0.1703	$1.2176	$1.2680	$1.3635	$0.2543	$0.2039	$0.1083
Dec-14	$1.2554	$1.2942	$0.0300	$1.3252	$1.3489	$1.4445	$1.3329	$1.4933	$1.5889	$0.1605	$0.2560	$1.1413	$1.1796	$1.2752	$0.1916	$0.1533	$0.0577
Jan-15	$1.0202	$1.0518	$0.0300	$1.0827	$1.1811	$1.2767	$1.0904	$1.3255	$1.4211	$0.2351	$0.3307	$1.0851	$1.0967	$1.1922	$0.0053	-$0.0062	-$0.1018
Feb-15	$1.0308	$1.0627	$0.0300	$1.0936	$0.9267	$1.0223	$1.1013	$1.0711	$1.1667	-$0.0302	$0.0654	$1.0536	$1.0396	$1.1352	$0.0478	$0.0617	-$0.0338
Mar-15	$1.0217	$1.0533	$0.0300	$1.0842	$0.9233	$1.0189	$1.0920	$1.0677	$1.1633	-$0.0242	$0.0713	$1.0043	$1.0115	$1.1070	$0.0876	$0.0805	-$0.0151
Apr-15	$0.9684	$0.9984	$0.0300	$1.0293	$0.9589	$1.0545	$1.0370	$1.1033	$1.1989	$0.0663	$0.1619	$0.9664	$0.9670	$1.0626	$0.0706	$0.0700	-$0.0256
May-15	$0.9464	$0.9757	$0.0300	$1.0066	$0.8722	$0.9678	$1.0143	$1.0166	$1.1122	$0.0023	$0.0979	$0.9538	$0.9269	$1.0224	$0.0605	$0.0875	-$0.0081
Jun-15	$0.9283	$0.9570	$0.0300	$0.9879	$0.8511	$0.9467	$0.9957	$0.9955	$1.0911	-$0.0001	$0.0954	$0.9350	$0.9176	$1.0132	$0.0607	$0.0781	-$0.0175
Jul-15	$0.8366	$0.8625	$0.0300	$0.8934	$0.8389	$0.9345	$0.9011	$0.9833	$1.0789	$0.0822	$0.1778	$0.9111	$0.9008	$0.9963	-$0.0100	$0.0004	-$0.0952
Aug-15	$0.7443	$0.7673	$0.0300	$0.7982	$0.7578	$0.8534	$0.8060	$0.9022	$0.9978	$0.0963	$0.1918	$0.9010	$0.8778	$0.9734	-$0.0950	-$0.0718	-$0.1674
Sep-15	$0.8007	$0.8255	$0.0300	$0.8564	$0.6567	$0.7523	$0.8641	$0.8011	$0.8967	-$0.0630	$0.0326	$0.9052	$0.8658	$0.9613	-$0.0411	-$0.0016	-$0.0972
Oct-15	$0.8951	$0.9228	$0.0300	$0.9537	$0.7178	$0.8134	$0.9614	$0.8622	$0.9578	-$0.0992	-$0.0036	$0.8969	$0.8683	$0.9639	$0.0646	$0.0931	-$0.0025
Nov-15	$0.8372	$0.8631	$0.0300	$0.8940	$0.8167	$0.9123	$0.9018	$0.9611	$1.0567	$0.0594	$0.1549	$0.8686	$0.8578	$0.9533	$0.0331	$0.0440	-$0.0516
Dec-15	$0.7893	$0.8137	$0.0300	$0.8446	$0.7500	$0.8456	$0.8524	$0.8944	$0.9900	$0.0421	$0.1376	$0.8555	$0.8274	$0.9230	-$0.0031	$0.0250	-$0.0706
Jan-16	$0.7776	$0.8016	$0.0300	$0.8326	$0.7011	$0.7967	$0.8403	$0.8455	$0.9411	$0.0052	$0.1008	$0.8554	$0.8109	$0.9065	-$0.0151	$0.0294	-$0.0662
Feb-16	$0.7689	$0.7927	$0.0300	$0.8236	$0.6856	$0.7812	$0.8313	$0.8300	$0.9256	-$0.0013	$0.0943	$0.8655	$0.8102	$0.9057	-$0.0342	$0.0212	-$0.0744
Mar-16	$0.7522	$0.7755	$0.0300	$0.8064	$0.6722	$0.7678	$0.8141	$0.8166	$0.9122	$0.0025	$0.0981	$0.8809	$0.8202	$0.9157	-$0.0668	-$0.0061	-$0.1016
Apr-16	$0.7307	$0.7533	$0.0300	$0.7842	$0.6544	$0.7500	$0.7920	$0.7988	$0.8944	$0.0069	$0.1024	$0.9037	$0.8339	$0.9294	-$0.1118	-$0.0419	-$0.1375
May-16	$0.7607	$0.7842	$0.0300	$0.8152	$0.6344	$0.7300	$0.8229	$0.7788	$0.8744	-$0.0440	$0.0515	$0.9366	$0.8570	$0.9526	-$0.1137	-$0.0341	-$0.1297
Jun-16	$0.7888	$0.8132	$0.0300	$0.8441	$0.6511	$0.7467	$0.8519	$0.7955	$0.8911	-$0.0563	$0.0392	$0.9626	$0.8896	$0.9852	-$0.1107	-$0.0378	-$0.1333
Jul-16	$0.8363	$0.8622	$0.0300	$0.8931	$0.6967	$0.7923	$0.9008	$0.8411	$0.9367	-$0.0597	$0.0359	$0.9916	$0.9167	$1.0122	-$0.0908	-$0.0158	-$0.1114
Aug-16	$0.8588	$0.8854	$0.0300	$0.9163	$0.7456	$0.8412	$0.9240	$0.8900	$0.9856	-$0.0340	$0.0616	$1.0237	$0.9444	$1.0400	-$0.0997	-$0.0204	-$0.1160
Sep-16	$0.8847	$0.9121	$0.0300	$0.9430	$0.7544	$0.8500	$0.9507	$0.8988	$0.9944	-$0.0519	$0.0437	$1.0467	$0.9737	$1.0692	-$0.0960	-$0.0230	-$0.1185
Oct-16	$0.9222	$0.9507	$0.0300	$0.9816	$0.7933	$0.8889	$0.9894	$0.9377	$1.0333	-$0.0516	$0.0439	$1.0406	$0.9961	$1.0917	-$0.0512	-$0.0067	-$0.1023
Nov-16	$0.9119	$0.9401	$0.0300	$0.9710	$0.8300	$0.9256	$0.9788	$0.9744	$1.0700	-$0.0043	$0.0912	$1.0263	$0.9894	$1.0850	-$0.0475	-$0.0107	-$0.1062
Dec-16	$0.9579	$0.9875	$0.0300	$1.0185	$0.8133	$0.9089	$1.0262	$0.9577	$1.0533	-$0.0684	$0.0271	$1.0191	$0.9733	$1.0689	$0.0071	$0.0529	-$0.0427
Jan-17	$1.0229	$1.0545	$0.0300	$1.0855	$0.8633	$0.9589	$1.0932	$1.0077	$1.1033	-$0.0855	$0.0101	$1.0115	$0.9654	$1.0609	$0.0817	$0.1278	$0.0323
Feb-17	$0.9926	$1.0233	$0.0300	$1.0542	$0.9211	$1.0167	$1.0620	$1.0655	$1.1611	$0.0036	$0.0991	$0.9903	$0.9587	$1.0543	$0.0717	$0.1033	$0.0077
Mar-17	$0.8493		$0.0300	$0.9065	$0.8889	$0.9845	$0.9142	$1.0333	$1.1289	$0.1191	$0.2147	$0.9698	$0.9394	$1.0350	-$0.0555	-$0.0252	-$0.1208
Apr-17	$0.8386	$0.8645	$0.0300	$0.8955	$0.7533	$0.8489	$0.9032	$0.8977	$0.9933	-$0.0055	$0.0901	$0.9699	$0.9215	$1.0170	-$0.0667	-$0.0183	-$0.1138
May-17	$0.8704	$0.8973	$0.0300	$0.9282	$0.7333	$0.8289	$0.9360	$0.8777	$0.9733	-$0.0582	$0.0373	$0.9649	$0.9226	$1.0182	-$0.0290	$0.0134	-$0.0822
Jun-17	$0.9137	$0.9420	$0.0300	$0.9729	$0.7656	$0.8612	$0.9806	$0.9100	$1.0056	-$0.0706	$0.0250	$0.9452	$0.9222	$1.0178	$0.0355	$0.0584	-$0.0372
Jul-17	$0.8991	$0.9269	$0.0300	$0.9578	$0.8233	$0.9189	$0.9656	$0.9677	$1.0633	$0.0022	$0.0977	$0.9125	$0.9046	$1.0002	$0.0531	$0.0609	-$0.0346
Aug-17	$0.8733	$0.9003	$0.0300	$0.9312	$0.8056	$0.9012	$0.9390	$0.9500	$1.0456	$0.0111	$0.1066	$0.8777	$0.8730	$0.9685	$0.0613	$0.0660	-$0.0295
Sep-17	$0.8499	$0.8762	$0.0300	$0.9071	$0.7811	$0.8767	$0.9148	$0.9255	$1.0211	$0.0107	$0.1063	$0.8494	$0.8383	$0.9339	$0.0655	$0.0765	-$0.0190
Oct-17	$0.8099	$0.8349	$0.0300	$0.8659	$0.7600	$0.8556	$0.8736	$0.9044	$1.0000	$0.0308	$0.1264	$0.8230	$0.8109	$0.9065	$0.0506	$0.0627	-$0.0329
Nov-17	$0.7553	$0.7787	$0.0300	$0.8096	$0.7311	$0.8267	$0.8173	$0.8755	$0.9711	$0.0582	$0.1538	$0.8064	$0.7844	$0.8800	$0.0109	$0.0329	-$0.0627

Appendix 1: Comparison of Current NDPSR NFDM Price with NDPSR 6-Month Forward Average Advanced NFDM Price, With Current and Proposal 21 Differentials, June 2012 - July 2023

							rrent Month Delivered Cost per Pound SNF			Class II SNF Delivered Cost vs. Delivered NFDM		Average Current Delivered Cost per Pound SNF for 6 Months Forward			6-Month Pre-Purchased NFDM vs Current Delivered Markets on a Per-Pound SNF Basis		
FMMO	NFDM Monthly Average Price	SNF cost per Pound from NFDM FOB Supplier	Purchase 6 Month Total Carry Cost	SNF Cost for 6-Month Pre-Purchased NFDM FOB Supplier	Current Month Announced Class II SNF	Current Month Proposal 21 Class II SNF	SNF Cost for Delivered NFDM for Current Month	Class II SNF Delivered Cost @ Current II Differential	Class II SNF Delivered Cost @ Proposal 21 Differential	Class II SNF Delivered Cost @ Current II Differential	Class II SNF Delivered Cost @ Proposal 21 Differential	SNF Cost for 6-Month Forward Avg. NDPSR NFDM	6- Month Forward Avg. @ CURRENT Class II SNF Price	6- Month Forward Avg. @ PROP 21 Class II SNF Price	Pre-Purchased NFDM vs. Current NFDM	Pre-Purchased NFDM vs Delivered Class II SNF with Current Make	Pre-Purchased NFDM vs Delivered Class II SNF with Prop 21 Make
Jan-18	$0.6966	$0.7181	$0.0300	$0.7491	$0.6333	$0.7289	$0.7568	$0.7777	$0.8733	$0.0209	$0.1165	$0.8287	$0.7707	$0.8663	-$0.0719	-$0.0139	-$0.1095
Feb-18	$0.7084	$0.7303	$0.0300	$0.7612	$0.5978	$0.6934	$0.7690	$0.7422	$0.8378	-$0.0267	$0.0688	$0.8434	$0.7865	$0.8821	-$0.0745	-$0.0175	-$0.1131
Mar-18	$0.6963	$0.7178	$0.0300	$0.7488	$0.6167	$0.7123	$0.7565	$0.7611	$0.8567	$0.0046	$0.1002	$0.8611	$0.8009	$0.8965	-$0.1046	-$0.0444	-$0.1400
Apr-18	$0.7134	$0.7355	$0.0300	$0.7664	$0.6011	$0.6967	$0.7741	$0.7455	$0.8411	-$0.0286	$0.0670	$0.8883	$0.8172	$0.9128	-$0.1142	-$0.0431	-$0.1386
May-18	$0.7937	$0.8182	$0.0300	$0.8492	$0.6056	$0.7012	$0.8569	$0.7500	$0.8456	-$0.1069	-$0.0113	$0.9159	$0.8431	$0.9387	-$0.0590	$0.0138	-$0.0818
Jun-18	$0.8150	$0.8402	$0.0300	$0.8711	$0.7033	$0.7989	$0.8789	$0.8477	$0.9433	-$0.0311	$0.0644	$0.9318	$0.8711	$0.9667	-$0.0529	$0.0078	-$0.0878
Jul-18	$0.7824	$0.8066	$0.0300	$0.8375	$0.7278	$0.8234	$0.8453	$0.8722	$0.9678	$0.0270	$0.1225	$0.9467	$0.8857	$0.9813	-$0.1014	-$0.0405	-$0.1360
Aug-18	$0.8111	$0.8362	$0.0300	$0.8671	$0.6844	$0.7800	$0.8748	$0.8288	$0.9244	-$0.0460	$0.0496	$0.9757	$0.8981	$0.9937	-$0.1009	-$0.0233	-$0.1188
Sep-18	$0.8548	$0.8812	$0.0300	$0.9122	$0.7144	$0.8100	$0.9199	$0.8588	$0.9544	-$0.0611	$0.0345	$1.0047	$0.9229	$1.0185	-$0.0848	-$0.0030	-$0.0986
Oct-18	$0.8739	$0.9009	$0.0300	$0.9319	$0.7567	$0.8523	$0.9396	$0.9011	$0.9967	-$0.0384	$0.0571	$1.0226	$0.9511	$1.0467	-$0.0830	-$0.0115	-$0.1071
Nov-18	$0.8860	$0.9134	$0.0300	$0.9443	$0.7733	$0.8689	$0.9521	$0.9177	$1.0133	-$0.0343	$0.0612	$1.0381	$0.9685	$1.0641	-$0.0861	-$0.0164	-$0.1120
Dec-18	$0.9020	$0.9299	$0.0300	$0.9608	$0.7911	$0.8867	$0.9686	$0.9355	$1.0311	-$0.0330	$0.0625	$1.0603	$0.9826	$1.0781	-$0.0917	-$0.0140	-$0.1096
Jan-19	$0.9513	$0.9807	$0.0300	$1.0116	$0.8022	$0.8978	$1.0194	$0.9466	$1.0422	-$0.0727	$0.0228	$1.0845	$1.0037	$1.0993	-$0.0651	$0.0157	-$0.0799
Feb-19	$0.9800	$1.0103	$0.0300	$1.0412	$0.8333	$0.9289	$1.0490	$0.9777	$1.0733	-$0.0712	$0.0243	$1.0996	$1.0270	$1.1226	-$0.0507	$0.0219	-$0.0736
Mar-19	$0.9589	$0.9886	$0.0300	$1.0195	$0.8833	$0.9789	$1.0272	$1.0277	$1.1233	$0.0005	$0.0961	$1.1088	$1.0468	$1.1424	-$0.0816	-$0.0196	-$0.1152
Apr-19	$0.9641	$0.9939	$0.0300	$1.0248	$0.8611	$0.9567	$1.0326	$1.0055	$1.1011	-$0.0270	$0.0685	$1.1248	$1.0563	$1.1519	-$0.0922	-$0.0237	-$0.1193
May-19	$1.0149	$1.0463	$0.0300	$1.0772	$0.8578	$0.9534	$1.0849	$1.0022	$1.0978	-$0.0827	$0.0129	$1.1474	$1.0709	$1.1665	-$0.0625	$0.0140	-$0.0815
Jun-19	$1.0431	$1.0754	$0.0300	$1.1063	$0.9178	$1.0134	$1.1140	$1.0622	$1.1578	-$0.0518	$0.0438	$1.1713	$1.0950	$1.1906	-$0.0573	$0.0190	-$0.0765
Jul-19	$1.0393	$1.0714	$0.0300	$1.1024	$0.9422	$1.0378	$1.1101	$1.0866	$1.1822	-$0.0235	$0.0721	$1.2010	$1.1167	$1.2122	-$0.0909	-$0.0066	-$0.1021
Aug-19	$1.0335	$1.0655	$0.0300	$1.0964	$0.9522	$1.0478	$1.1041	$1.0966	$1.1922	-$0.0075	$0.0881	$1.2364	$1.1444	$1.2400	-$0.1323	-$0.0403	-$0.1359
Sep-19	$1.0519	$1.0844	$0.0300	$1.1154	$0.9400	$1.0356	$1.1231	$1.0844	$1.1800	-$0.0386	$0.0569	$1.2728	$1.1754	$1.2709	-$0.1497	-$0.0523	-$0.1478
Oct-19	$1.0957	$1.1296	$0.0300	$1.1605	$0.9489	$1.0445	$1.1682	$1.0933	$1.1889	-$0.0749	$0.0207	$1.2838	$1.2109	$1.3065	-$0.1156	-$0.0427	-$0.1382
Nov-19	$1.1540	$1.1897	$0.0300	$1.2206	$1.0022	$1.0978	$1.2284	$1.1466	$1.2422	-$0.0817	$0.0138	$1.2597	$1.2296	$1.3252	-$0.0313	-$0.0013	-$0.0968
Dec-19	$1.2161	$1.2537	$0.0300	$1.2846	$1.0478	$1.1434	$1.2924	$1.1922	$1.2878	-$0.1001	-$0.0046	$1.2073	$1.2057	$1.3013	$0.0851	$0.0866	-$0.0089
Jan-20	$1.2451	$1.2836	$0.0300	$1.3145	$1.1089	$1.2045	$1.3223	$1.2533	$1.3489	-$0.0689	$0.0266	$1.1548	$1.1550	$1.2506	$0.1675	$0.1673	$0.0717
Feb-20	$1.2453	$1.2838	$0.0300	$1.3147	$1.1378	$1.2334	$1.3225	$1.2822	$1.3778	-$0.0402	$0.0553	$1.1078	$1.1028	$1.1983	$0.2146	$0.2197	$0.1241
Mar-20	$1.1160	$1.1505	$0.0300	$1.1814	$1.1533	$1.2489	$1.1892	$1.2977	$1.3933	$0.1086	$0.2041	$1.0591	$1.0580	$1.1535	$0.1300	$0.1312	$0.0357
Apr-20	$0.9552	$0.9847	$0.0300	$1.0157	$1.0611	$1.1567	$1.0234	$1.2055	$1.3011	$0.1821	$0.2777	$1.0395	$1.0107	$1.1063	-$0.0160	$0.0127	-$0.0829
May-20	$0.8492	$0.8755	$0.0300	$0.9064	$0.8589	$0.9545	$0.9141	$1.0033	$1.0989	$0.0892	$0.1848	$1.0587	$0.9848	$1.0804	-$0.1445	-$0.0707	-$0.1663
Jun-20	$0.9106	$0.9388	$0.0300	$0.9697	$0.7433	$0.8389	$0.9774	$0.8877	$0.9833	-$0.0897	$0.0059	$1.0986	$1.0028	$1.0984	-$0.1212	-$0.0254	-$0.1209
Jul-20	$0.9717	$1.0018	$0.0300	$1.0327	$0.7956	$0.8912	$1.0404	$0.9400	$1.0356	-$0.1004	-$0.0048	$1.1303	$1.0439	$1.1395	-$0.0899	-$0.0035	-$0.0991
Aug-20	$0.9619	$0.9916	$0.0300	$1.0226	$0.8689	$0.9645	$1.0303	$1.0133	$1.1089	-$0.0170	$0.0786	$1.1583	$1.0785	$1.1741	-$0.1280	-$0.0482	-$0.1438
Sep-20	$1.0014	$1.0324	$0.0300	$1.0633	$0.8700	$0.9656	$1.0710	$1.0144	$1.1100	-$0.0566	$0.0390	$1.1848	$1.1054	$1.2009	-$0.1138	-$0.0343	-$0.1299
Oct-20	$1.0670	$1.1000	$0.0300	$1.1309	$0.9056	$1.0012	$1.1387	$1.0500	$1.1456	-$0.0886	$0.0069	$1.2047	$1.1337	$1.2293	-$0.0660	$0.0049	-$0.0906
Nov-20	$1.0816	$1.1151	$0.0300	$1.1460	$0.9667	$1.0623	$1.1537	$1.1111	$1.2067	-$0.0426	$0.0530	$1.2220	$1.1500	$1.2456	-$0.0683	$0.0037	-$0.0918
Dec-20	$1.0951	$1.1290	$0.0300	$1.1599	$0.9900	$1.0856	$1.1676	$1.1344	$1.2300	-$0.0332	$0.0624	$1.2491	$1.1663	$1.2618	-$0.0815	$0.0014	-$0.0942
Jan-21	$1.1345	$1.1696	$0.0300	$1.2005	$1.0033	$1.0989	$1.2082	$1.1477	$1.2433	-$0.0605	$0.0351	$1.2791	$1.1887	$1.2842	-$0.0708	$0.0196	-$0.0760
Feb-21	$1.1164	$1.1509	$0.0300	$1.1819	$1.0300	$1.1256	$1.1896	$1.1744	$1.2700	-$0.0151	$0.0804	$1.2998	$1.2165	$1.3120	-$0.1102	-$0.0269	-$0.1224
Mar-21	$1.1169	$1.1514	$0.0300	$1.1824	$1.0400	$1.1356	$1.1901	$1.1844	$1.2800	-$0.0057	$0.0899	$1.3255	$1.2368	$1.3324	-$0.1354	-$0.0467	-$0.1423
Apr-21	$1.1680	$1.2041	$0.0300	$1.2351	$1.0033	$1.0989	$1.2428	$1.1477	$1.2433	-$0.0950	$0.0005	$1.3538	$1.2570	$1.3526	-$0.1110	-$0.0142	-$0.1098
May-21	$1.2392	$1.2775	$0.0300	$1.3085	$1.0644	$1.1600	$1.3162	$1.2088	$1.3044	-$0.1073	-$0.0118	$1.3868	$1.2866	$1.3822	-$0.0706	$0.0295	-$0.0660
Jun-21	$1.2696	$1.3089	$0.0300	$1.3398	$1.1244	$1.2200	$1.3475	$1.2688	$1.3644	-$0.0787	$0.0169	$1.4276	$1.3172	$1.4128	-$0.0801	$0.0303	-$0.0652
Jul-21	$1.2552	$1.2940	$0.0300	$1.3249	$1.1700	$1.2656	$1.3327	$1.3144	$1.4100	-$0.0182	$0.0773	$1.4753	$1.3561	$1.4517	-$0.1426	-$0.0234	-$0.1190
Aug-21	$1.2660	$1.3052	$0.0300	$1.3361	$1.1522	$1.2478	$1.3438	$1.2966	$1.3922	-$0.0472	$0.0484	$1.5429	$1.4002	$1.4957	-$0.1991	-$0.0564	-$0.1519
Sep-21	$1.2816	$1.3212	$0.0300	$1.3522	$1.1611	$1.2567	$1.3599	$1.3055	$1.4011	-$0.0544	$0.0412	$1.6224	$1.4613	$1.5569	-$0.2625	-$0.1014	-$0.1970
Oct-21	$1.3598	$1.4019	$0.0300	$1.4328	$1.1811	$1.2767	$1.4405	$1.3255	$1.4211	-$0.1150	-$0.0194	$1.7107	$1.5346	$1.6302	-$0.2701	-$0.0941	-$0.1897
Nov-21	$1.4769	$1.5226	$0.0300	$1.5535	$1.2478	$1.3434	$1.5612	$1.3922	$1.4878	-$0.1690	-$0.0734	$1.7917	$1.6194	$1.7150	-$0.2304	-$0.0582	-$0.1538
Dec-21	$1.5471	$1.5949	$0.0300	$1.6259	$1.3578	$1.4534	$1.6336	$1.5022	$1.5978	-$0.1314	-$0.0358	$1.8488	$1.6989	$1.7944	-$0.2152	-$0.0653	-$0.1608
Jan-22	$1.6488	$1.6998	$0.0300	$1.7307	$1.4344	$1.5300	$1.7385	$1.5788	$1.6744	-$0.1596	-$0.0641	$1.8950	$1.7596	$1.8552	-$0.1565	-$0.0212	-$0.1167
Feb-22	$1.7284	$1.7819	$0.0300	$1.8128	$1.5189	$1.6145	$1.8205	$1.6633	$1.7589	-$0.1572	-$0.0616	$1.9210	$1.8061	$1.9017	-$0.1004	$0.0144	-$0.0811
Mar-22	$1.7954	$1.8509	$0.0300	$1.8819	$1.6011	$1.6967	$1.8896	$1.7455	$1.8411	-$0.1440	-$0.0485	$1.9108	$1.8405	$1.9361	-$0.0212	$0.0490	-$0.0465
Apr-22	$1.8314	$1.8880	$0.0300	$1.9190	$1.6900	$1.7856	$1.9267	$1.8344	$1.9300	-$0.0923	$0.0033	$1.8738	$1.8426	$1.9381	$0.0529	$0.0841	-$0.0114
May-22	$1.8095	$1.8655	$0.0300	$1.8964	$1.7244	$1.8200	$1.9041	$1.8688	$1.9644	-$0.0353	$0.0603	$1.8309	$1.8085	$1.9041	$0.0732	$0.0956	$0.0001
Jun-22	$1.8156	$1.8718	$0.0300	$1.9027	$1.7222	$1.8178	$1.9104	$1.8666	$1.9622	-$0.0438	$0.0518	$1.7785	$1.7676	$1.8632	$0.1319	$0.1428	$0.0473
Jul-22	$1.8001	$1.8558	$0.0300	$1.8867	$1.7133	$1.8089	$1.8944	$1.8577	$1.9533	-$0.0367	$0.0589	$1.7167	$1.7117	$1.8072	$0.1777	$0.1828	$0.0872
Aug-22	$1.6690	$1.7206	$0.0300	$1.7515	$1.7256	$1.8212	$1.7593	$1.8700	$1.9656	$0.1108	$0.2063	$1.6422	$1.6543	$1.7498	$0.1171	$0.1050	$0.0094
Sep-22	$1.5803	$1.6292	$0.0300	$1.6601	$1.6133	$1.7089	$1.6678	$1.7577	$1.8533	$0.0899	$0.1855	$1.5711	$1.5833	$1.6789	$0.0968	$0.0845	-$0.0111
Oct-22	$1.5819	$1.6308	$0.0300	$1.6618	$1.4856	$1.5812	$1.6695	$1.6300	$1.7256	-$0.0394	$0.0561	$1.5046	$1.5052	$1.6008	$0.1649	$0.1643	$0.0687
Nov-22	$1.5045	$1.5510	$0.0300	$1.5820	$1.4789	$1.5745	$1.5897	$1.6233	$1.7189	$0.0337	$0.1292	$1.4313	$1.4441	$1.5396	$0.1584	$0.1456	$0.0501
Dec-22	$1.4559	$1.5009	$0.0300	$1.5319	$1.3867	$1.4823	$1.5396	$1.5311	$1.6267	-$0.0084	$0.0871	$1.3705	$1.3787	$1.4743	$0.1691	$0.1609	$0.0653
Jan-23	$1.3662	$1.4085	$0.0300	$1.4394	$1.3689	$1.4645	$1.4471	$1.5133	$1.6089	$0.0662	$0.1618	$1.3209	$1.3231	$1.4187	$0.1262	$0.1240	$0.0284
Feb-23	$1.2553	$1.2941	$0.0300	$1.3251	$1.3000	$1.3956	$1.3328	$1.4444	$1.5400	$0.1117	$0.2072	$1.2841	$1.2735	$1.3691	$0.0487	$0.0593	-$0.0363
Mar-23	$1.1935	$1.2304	$0.0300	$1.2613	$1.1444	$1.2400	$1.2691	$1.2888	$1.3844	$0.0198	$0.1153	$1.2639	$1.2355	$1.3311	$0.0052	$0.0335	-$0.0620
Apr-23	$1.1551	$1.1908	$0.0300	$1.2218	$1.1189	$1.2145	$1.2295	$1.2633	$1.3589	$0.0339	$0.1294	$1.2505	$1.2178	$1.3133	-$0.0210	$0.0117	-$0.0838
May-23	$1.1505	$1.1861	$0.0300	$1.2170	$1.0867	$1.1823	$1.2247	$1.2311	$1.3267	$0.0064	$0.1020	$1.2506	$1.2026	$1.2982	-$0.0258	$0.0221	-$0.0734
Jun-23	$1.1674	$1.2035	$0.0300	$1.2344	$1.0533	$1.1489	$1.2422	$1.1977	$1.2933	-$0.0444	$0.0511	$1.2567	$1.1955	$1.2911	-$0.0145	$0.0466	-$0.0489
Jul-23	$1.1522	$1.1878	$0.0300	$1.2188	$1.0711	$1.1667	$1.2265	$1.2155	$1.3111	-$0.0110	$0.0846	$1.2610	$1.2011	$1.2967	-$0.0345	$0.0254	-$0.0702
Aug-23	$1.1374	$1.1726	$0.0300	$1.2035	$1.0722	$1.1678	$1.2112	$1.2166	$1.3122	$0.0054	$0.1010	$1.2619	$1.1982	$1.2938			
Sep-23	$1.1155	$1.1500	$0.0300	$1.1809	$1.0378	$1.1334	$1.1887	$1.1822	$1.2778	-$0.0064	$0.0891	$1.3792	$1.2964	$1.3920			
Oct-23	$1.1558	$1.1915	$0.0300	$1.2225	$1.0278	$1.1234	$1.2302	$1.1722	$1.2678	-$0.0580	$0.0376	$1.5138	$1.4340	$1.5295			
Nov-23	$1.1860	$1.2227	$0.0300	$1.2536	$1.0444	$1.1400	$1.2613	$1.1888	$1.2844	-$0.0725	$0.0231	$1.4614	$1.3993	$1.4948			
Dec-23	$1.1924	$1.2293	$0.0300	$1.2602	$1.0867	$1.1823	$1.2679	$1.2311	$1.3267	-$0.0368	$0.0588	$1.3878	$1.3342	$1.4298			
2013	$1.7066	$1.7594	$0.0300	$1.7903	$1.5631	$1.6586	$1.7980	$1.7075	$1.8031	-$0.0905	$0.0050	$1.9337	$1.8043	$1.8999	-$0.1356	-$0.0063	-$0.1019
2014	$1.7682	$1.8229	$0.0300	$1.8538	$1.7257	$1.8212	$1.8616	$1.8701	$1.9657	$0.0085	$0.1041	$1.6697	$1.6834	$1.7789	$0.1918	$0.1782	$0.0826
2015	$0.9016	$0.9295	$0.0300	$0.9604	$0.8543	$0.9498	$0.9681	$0.9987	$1.0943	$0.0306	$0.1261	$0.9447	$0.9298	$1.0253	$0.0234	$0.0384	-$0.0572
2016	$0.8292	$0.8549	$0.0300	$0.8858	$0.7193	$0.8149	$0.8935	$0.8638	$0.9593	-$0.0297	$0.0658	$0.9627	$0.9013	$0.9968	-$0.0692	-$0.0078	-$0.1033
2017	$0.8666	$0.8934	$0.0300	$0.9243	$0.7906	$0.8861	$0.9320	$0.9350	$1.0306	$0.0030	$0.0985	$0.9111	$0.8837	$0.9793	$0.0209	$0.0483	-$0.0473
2018	$0.7945	$0.8190	$0.0300	$0.8500	$0.6838	$0.7793	$0.8577	$0.8282	$0.9238	-$0.0295	$0.0661	$0.9431	$0.8749	$0.9704	-$0.0854	-$0.0172	-$0.1127
2019	$1.0419	$1.0741	$0.0300	$1.1051	$0.9157	$1.0113	$1.1128	$1.0602	$1.1557	-$0.0526	$0.0429	$1.1831	$1.1152	$1.2108	-$0.0703	-$0.0024	-$0.0980
2020	$1.0417	$1.0739	$0.0300	$1.1048	$0.9550	$1.0506	$1.1126	$1.0995	$1.1950	-$0.0131	$0.0825	$1.1390	$1.0827	$1.1782	-$0.0264	$0.0299	-$0.0657
2021	$1.2693	$1.3085	$0.0300	$1.3395	$1.1280	$1.2235	$1.3472	$1.2724	$1.3680	-$0.0748	$0.0208	$1.5054	$1.3811	$1.4767	-$0.1582	-$0.0339	-$0.1295
2022	$1.6851	$1.7372	$0.0300	$1.7681	$1.5912	$1.6868	$1.7758	$1.7356	$1.8312	-$0.0402	$0.0554	$1.7039	$1.6752	$1.7707	$0.0720	$0.1007	$0.0051
2023	$1.1856	$1.2223	$0.0300	$1.2532	$1.1177	$1.2132	$1.2609	$1.2621	$1.3577	$0.0012	$0.0967	$1.3243	$1.2759	$1.3715	$0.0120	$0.0461	-$0.0495

Sources:	Source: USDA Announcement of Advanced Prices and Pricing Factors,	Current vs 6-Month Advanced: Average Monthly Difference	-$0.0298	$0.0658
		Current vs 6-Month Advanced: Highest Monthly Difference	$0.2841	$0.3796
		Current vs 6-Month Advanced: Lowest Monthly Difference	-$0.1834	-$0.0878
		Current vs 6-Month Advanced: Standard Deviation	$0.0764	$0.0764
				25
		Months Higher than NFDM Cost		114
		Total Months		139
		% Lower than NFDM	70.5%	18.0%

-$0.0287	$0.0299	-$0.0657
$0.3679	$0.2766	$0.1810
-$0.2701	-$0.1151	-$0.2107
$0.1223	$0.0778	$0.0778
	56	111
	78	23
	134	134
	41.8%	82.8%

Appendix 2: Monthly Midwestern and Northeastern Cream Prices, as Reported by USDA-AMS Dairy Market News, 2019-2023

Month & Year	Midwestern Cream	Northeastern Cream	Midwest vs NE Cream	Percent Difference:
Jan 19	$2.6433	$2.4925	$0.1508	6.1%
Feb 19	$2.6582	$2.5644	$0.0938	3.7%
Mar 19	$2.7342	$2.6702	$0.0640	2.4%
Apr 19	$2.8389	$2.8091	$0.0298	1.1%
May 19	$2.9634	$3.0084	-$0.0450	-1.5%
Jun 19	$3.0921	$3.1605	-$0.0684	-2.2%
Jul 19	$3.2017	$3.2332	-$0.0315	-1.0%
Aug 19	$3.1863	$3.2220	-$0.0357	-1.1%
Sep 19	$2.8671	$2.8544	$0.0127	0.4%
Oct 19	$2.7666	$2.7467	$0.0199	0.7%
Nov 19	$2.6539	$2.6664	-$0.0125	-0.5%
Dec 19	$2.4136	$2.3665	$0.0471	2.0%
Jan 20	$2.3045	$2.1614	$0.1431	6.6%
Feb 20	$2.1408	$2.0461	$0.0947	4.6%
Mar 20	$2.0912	$1.9637	$0.1275	6.5%
Apr 20	$1.1746	$0.9716	$0.2030	20.9%
May 20	$1.7044	$1.5989	$0.1055	6.6%
Jun 20	$2.5417	$2.5839	-$0.0422	-1.6%
Jul 20	$2.3992	$2.3780	$0.0212	0.9%
Aug 20	$2.1264	$2.1107	$0.0157	0.7%
Sep 20	$1.9845	$2.0183	-$0.0338	-1.7%
Oct 20	$1.9745	$2.0197	-$0.0452	-2.2%
Nov 20	$1.8287	$1.8622	-$0.0335	-1.8%
Dec 20	$1.7103	$1.6707	$0.0396	2.4%
Jan 21	$1.6620	$1.5974	$0.0646	4.0%
Feb 21	$1.6328	$1.5804	$0.0524	3.3%
Mar 21	$2.0759	$2.0956	-$0.0197	-0.9%
Apr 21	$2.3695	$2.4343	-$0.0648	-2.7%
May 21	$2.4217	$2.4388	-$0.0171	-0.7%
Jun 21	$2.3705	$2.3914	-$0.0209	-0.9%
Jul 21	$2.2554	$2.2454	$0.0100	0.4%
Aug 21	$2.2193	$2.2163	$0.0030	0.1%
Sep 21	$2.3985	$2.4290	-$0.0305	-1.3%
Oct 21	$2.4019	$2.4458	-$0.0439	-1.8%
Nov 21	$2.8021	$2.7692	$0.0329	1.2%
Dec 21	$2.7836	$2.7937	-$0.0101	-0.4%
Jan-22	$3.5290	$3.3388	$0.1902	5.7%
Feb-22	$3.3252	$3.2912	$0.0340	1.0%
Mar-22	$3.5377	$3.6138	-$0.0761	-2.1%
Apr-22	$3.5462	$3.7119	-$0.1657	-4.5%
May-22	$3.5461	$3.6609	-$0.1148	-3.1%
Jun-22	$3.8831	$4.0169	-$0.1338	-3.3%
Jul-22	$3.9970	$4.1793	-$0.1823	-4.4%
Aug-22	$4.4241	$4.6154	-$0.1913	-4.1%
Sep-22	$4.3164	$4.6687	-$0.3523	-7.5%
Oct-22	$4.1936	$4.4704	-$0.2768	-6.2%
Nov-22	$3.7356	$3.9956	-$0.2600	-6.5%
Dec-22	$3.2734	$3.4577	-$0.1843	-5.3%
Jan-23	$2.8713	$2.8135	$0.0578	2.1%
Feb-23	$2.9037	$2.9648	-$0.0611	-2.1%
Mar-23	$2.9656	$3.0162	-$0.0506	-1.7%
Apr-23	$2.9629	$3.0219	-$0.0590	-2.0%
May-23	$3.0690	$3.1271	-$0.0581	-1.9%
Jun-23	$3.0436	$3.1208	-$0.0772	-2.5%
Jul-23	$3.2974	$3.4771	-$0.1797	-5.2%
Aug-23	$3.7712	$3.8732	-$0.1020	-2.6%
Sep-23	$3.6792	$3.8952	-$0.2160	-5.5%
Oct-23	$4.4488	$4.6616	-$0.2128	-4.6%
Nov-23	$3.6111	$3.5841	$0.0270	0.8%
Dec-23	$2.9879	$3.0207	-$0.0328	-1.1%
2019	$2.8349	$2.8162	$0.0188	0.8%
2020	$1.9984	$1.9488	$0.0496	3.5%
2021	$2.2828	$2.2864	-$0.0037	0.0%
2022	$3.7756	$3.9184	-$0.1428	-3.4%
2023	$3.3010	$3.3814	-$0.0804	-2.2%
2019-2023 Statistics	Midwestern Cream	Northeastern Cream	Midwest vs NE Cream	Percent Difference:
Average	2.7295	2.7483	-0.0188	0.2%
High	4.4241	4.6687	0.2030	20.9%
Low	1.1746	0.9716	-0.3523	-7.5%
STDEV	0.7464	0.8294	0.1138	4.5%

Sources: https://www.ams.usda.gov/market-news/dairy-market-news-weekly-summary-and-monthly-averages

Appendix 3: USDA-AMS Dairy Market News Monthly Northeast Condensed Skim & FMMO Class II SNF Prices, 2019-2023

Month & Year	NE Class II Condensed Skim	FMMO Class II SNF	Difference: Condensed Skim vs II SNF	Deviation from '19-'23 Average Mo. Difference	Difference Per Cwt Skim (9# SNF/Cwt)	Deviation from '19-'23 Average Mo. Difference Per Cwt.
Jan 19	$0.7567	$0.8022	-$0.0455	-$0.0332	-$0.41	-$0.30
Feb 19	$0.7342	$0.8333	-$0.0991	-$0.0868	-$0.89	-$0.78
Mar 19	$0.7679	$0.8833	-$0.1154	-$0.1031	-$1.04	-$0.93
Apr 19	$0.8330	$0.8611	-$0.0281	-$0.0158	-$0.25	-$0.14
May 19	$0.8023	$0.8578	-$0.0555	-$0.0432	-$0.50	-$0.39
Jun 19	$0.7750	$0.9178	-$0.1428	-$0.1305	-$1.29	-$1.17
Jul 19	$0.7841	$0.9422	-$0.1581	-$0.1458	-$1.42	-$1.31
Aug 19	$0.7886	$0.9522	-$0.1636	-$0.1513	-$1.47	-$1.36
Sep 19	$0.8618	$0.9400	-$0.0782	-$0.0659	-$0.70	-$0.59
Oct 19	$1.0100	$0.9489	$0.0611	$0.0734	$0.55	$0.66
Nov 19	$1.0100	$1.0022	$0.0078	$0.0201	$0.07	$0.18
Dec 19	$0.9571	$1.0478	-$0.0907	-$0.0784	-$0.82	-$0.71
Jan 20	$0.8690	$1.1089	-$0.2399	-$0.2276	-$2.16	-$2.05
Feb 20	$0.9000	$1.1378	-$0.2378	-$0.2255	-$2.14	-$2.03
Mar 20	$0.8500	$1.1533	-$0.3033	-$0.2910	-$2.73	-$2.62
Apr 20	$0.4341	$1.0611	-$0.6270	-$0.6147	-$5.64	-$5.53
May 20	$0.6638	$0.8589	-$0.1951	-$0.1828	-$1.76	-$1.65
Jun 20	$0.8273	$0.7433	$0.0840	$0.0963	$0.76	$0.87
Jul 20	$0.8500	$0.7956	$0.0544	$0.0667	$0.49	$0.60
Aug 20	$0.9071	$0.8689	$0.0382	$0.0505	$0.34	$0.45
Sep 20	$0.9321	$0.8700	$0.0621	$0.0744	$0.56	$0.67
Oct 20	$0.9929	$0.9056	$0.0873	$0.0996	$0.79	$0.90
Nov 20	$1.0684	$0.9667	$0.1017	$0.1140	$0.92	$1.03
Dec 20	$0.7091	$0.9900	-$0.2809	-$0.2686	-$2.53	-$2.42
Jan 21	$0.5263	$1.0033	-$0.4770	-$0.4647	-$4.29	-$4.18
Feb 21	$0.5000	$1.0300	-$0.5300	-$0.5177	-$4.77	-$4.66
Mar 21	$0.5663	$1.0400	-$0.4737	-$0.4614	-$4.26	-$4.15
Apr 21	$0.9420	$1.0033	-$0.0613	-$0.0490	-$0.55	-$0.44
May 21	$0.9750	$1.0644	-$0.0894	-$0.0771	-$0.80	-$0.69
Jun 21	$0.8761	$1.1244	-$0.2483	-$0.2360	-$2.23	-$2.12
Jul 21	$0.9045	$1.1700	-$0.2655	-$0.2532	-$2.39	-$2.28
Aug 21	$0.9795	$1.1522	-$0.1727	-$0.1604	-$1.55	-$1.44
Sep 21	$1.0393	$1.1611	-$0.1218	-$0.1095	-$1.10	-$0.99
Oct 21	$1.0888	$1.1811	-$0.0923	-$0.0800	-$0.83	-$0.72
Nov 21	$1.1598	$1.2478	-$0.0880	-$0.0757	-$0.79	-$0.68
Dec 21	$1.5350	$1.3578	$0.1772	$0.1895	$1.59	$1.71
Jan 22	$1.6095	$1.4344	$0.1751	$0.1874	$1.58	$1.69
Feb 22	$1.6992	$1.5189	$0.1803	$0.1926	$1.62	$1.73
Mar 22	$1.7750	$1.6011	$0.1739	$0.1862	$1.57	$1.68
Apr 22	$1.8607	$1.6900	$0.1707	$0.1830	$1.54	$1.65
May 22	$1.8950	$1.7244	$0.1706	$0.1829	$1.54	$1.65
Jun 22	$1.8950	$1.7222	$0.1728	$0.1851	$1.56	$1.67
Jul 22	$1.8950	$1.7133	$0.1817	$0.1940	$1.64	$1.75
Aug 22	$1.8639	$1.7256	$0.1383	$0.1506	$1.24	$1.36
Sep 22	$1.7590	$1.6133	$0.1457	$0.1580	$1.31	$1.42
Oct 22	$1.6620	$1.4856	$0.1764	$0.1887	$1.59	$1.70
Nov 22	$1.6415	$1.4789	$0.1626	$0.1749	$1.46	$1.57
Dec 22	$1.5605	$1.3867	$0.1738	$0.1861	$1.56	$1.67
Jan 23	$1.5217	$1.3689	$0.1528	$0.1651	$1.38	$1.49
Feb 23	$1.4582	$1.3000	$0.1582	$0.1705	$1.42	$1.53
Mar 23	$1.3107	$1.1444	$0.1663	$0.1786	$1.50	$1.61
Apr 23	$1.2875	$1.1189	$0.1686	$0.1809	$1.52	$1.63
May 23	$1.2523	$1.0867	$0.1656	$0.1779	$1.49	$1.60
Jun 23	$1.2298	$1.0533	$0.1765	$0.1888	$1.59	$1.70
Jul 23	$1.2450	$1.0711	$0.1739	$0.1862	$1.57	$1.68
Aug 23	$1.2398	$1.0722	$0.1676	$0.1799	$1.51	$1.62
Sep 23	$1.2125	$1.0378	$0.1747	$0.1870	$1.57	$1.68
Oct 23	$1.2083	$1.0278	$0.1805	$0.1928	$1.62	$1.74
Nov 23	$1.2245	$1.0444	$0.1801	$0.1924	$1.62	$1.73
Dec 23	$1.2690	$1.0867	$0.1823	$0.1946	$1.64	$1.75
2019	$0.8401	$0.9157	-$0.0757	-$0.0634	-$0.68	-$0.57
2020	$0.8337	$0.9550	-$0.1214	-$0.1091	-$1.09	-$0.98
2021	$0.9244	$1.1280	-$0.2036	-$0.1913	-$1.83	-$1.72
2022	$1.7597	$1.5912	$0.1685	$0.1808	$1.52	$1.63
2023	$1.2883	$1.1177	$0.1706	$0.1829	$1.54	$1.65
Average	$1.1292	$1.1415	-$0.0123	$0.0000	-$0.11	$0.00
High	$1.8950	$1.7256	$0.1823	$0.1946	$1.64	$1.75
Low	$0.4341	$0.7433	-$0.6270	-$0.6147	-$5.64	-$5.53
STDEV	$0.3962	$0.2653	$0.2067	$0.2190	$1.86	$1.97

Sources: https://www.ams.usda.gov/sites/default/files/media/DY2022AnnualSummary.pdf
https://mymarketnews.ams.usda.gov/filerepo/sites/default/files/1623/2023-01-01/789988/ams_1623_00052_01.pdf