NEW BRUNSWICK
ENERGY & UTILITIES BOARD

COMMISSION DE L'ÉNERGIE ET DES SERVICES PUBLICS
NOUVEAU-BRUNSWICK

DECISION

IN THE MATTER OF a review of the relevant percentage for each base product relating to ultra-low sulphur diesel fuel and furnace oil pursuant to section 2 of the *General Regulation – Petroleum Products Pricing Act*, N.B. Reg. 2006-41.

(Matter No. 571)

March 7, 2024

IN THE MATTER OF a review of the relevant percentage for each base product relating to ultra-low sulphur diesel fuel and furnace oil pursuant to section 2 of the *General Regulation – Petroleum Products Pricing Act*, N.B. Reg. 2006-41. (Matter No. 571)

ORAL HEARING: December 5, 2023

NEW BRUNSWICK ENERGY AND UTILITIES BOARD:

Presiding Chair	Christopher Stewart
Vice-Chairperson	Stephanie Wilson
Member	Heather Black

PARTICIPANTS:

The Oil Heat Association of New Brunswick	Peter Clark
PUBLIC INTERVENER:	Alain Chiasson

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1 Introduction and Summary Conclusion

[1] This decision arises out of a need for the Board to determine the relevant percentage of each petroleum product used to calculate benchmark prices for ultra-low sulphur diesel fuel (USLD) and furnace oil, as required by section 2 of the *General Regulation – Petroleum Products Pricing Act* (Regulation). The Board uses benchmark prices to calculate maximum retail prices for these fuels.

[2] For the following reasons, the Board establishes the relevant percentages as described in Appendix A.

2 Overview

2.1 Blending is necessary to maintain fuel operability in winter

[3] Wax crystals form in diesel fuel and furnace oil at low temperatures, reducing the operability of those fuels. The temperature at which wax crystals are first visually observed in a fuel as it is cooled under test conditions is known as the "cloud point" of that fuel and is a widely used measure of the low-temperature operability limit of fuels.

[4] Suppliers blend additives into ULSD and furnace oil to maintain operability in cold temperatures by lowering the cloud point of the blended product. Ultra-low sulphur kerosene is a commonly used additive because it has a substantially lower cloud point than ULSD or furnace oil. More additive is required as temperatures decline through the fall and into the winter; less as temperatures rise and spring approaches. The relative proportion of additive and ULSD or furnace oil is known as the winter blending percentage.

2.2 Winter blending percentages are used to calculate benchmark prices

[5] The Board applies winter blending percentages when determining benchmark prices for ULSD and furnace oil. Benchmark prices are intended to approximate actual market prices and are the foundational component of regulated petroleum prices.

[6] The Regulation was amended in December 2022 to require the Board to determine the relevant winter blending percentages. The Board then issued an Order initiating this review and maintaining the previously prescribed percentages pending its conclusion.

[7] The Board engaged Gardner Pinfold Consultants Inc. to consult with industry and review the previously prescribed winter blending percentages. The Board instructed Gardner

Pinfold to make a recommendation as to whether those percentages are appropriate and, if not, to recommend appropriate blending percentages to be applied to the prescribed base petroleum products.

[8] The Oil Heat Association of New Brunswick, the Public Intervener, and Board staff participated in the proceeding.

3 Blending percentages should reasonably reflect actual blending

[9] The *Petroleum Products Pricing Act* requires the Board to consider the fact that consumers should benefit from the lowest price possible without jeopardizing the continuity of supply of petroleum products.

[10] The Board considers that establishing winter blending percentages that reasonably reflect refiners' actual blends is the most effective way to satisfy this requirement because it will produce benchmark prices that reasonably reflect market prices. Benchmark prices that are materially higher than market prices may deny consumers the benefit of low prices, while benchmark prices that are materially lower than market prices may pose a threat to the continuity of supply by causing suppliers to exit the market.

4 Industry uses cloud point schedules for blending percentages

[11] Mr. Gardner testified at the hearing on behalf of Garner Pinfold. He was qualified as an expert in the areas of petroleum products pricing and winter blending percentages in the Province of New Brunswick. Mr. Gardner explained that Gardner Pinfold consulted with six suppliers and received responses from two primary suppliers representing the large majority of the market in New Brunswick.

[12] The Board finds that the industry responses on which Gardner Pinfold bases its conclusions are reasonably representative of the New Brunswick market because the respondents supply the large majority of the New Brunswick market.

[13] Gardner Pinfold reported that cloud point is a measure of the low-temperature operability limit of fuel and is an important input to petroleum product blend recipes. Gardner Pinfold informed the Board that the industry uses a cloud point-based blending schedule developed by members of the Canadian Fuels Association using 1981 to 2010 weather data. The schedule reflects Canadian General Standards Board specifications for diesel, but no similar specifications exist for furnace oil. Instead, the schedule reflects blending percentages for furnace oil that are agreed between refiners and customers.

[14] The schedule sets out monthly or half-monthly low-temperature limits for blended ULSD and furnace oil in each of two geographical zones in the province and the corresponding diesel/kerosene percentages needed to maintain the operability of those products at those temperatures. Table 1 of the Gardner Pinfold report reproduces the portion of the schedule that is relevant to New Brunswick.

[15] While the schedule contemplates blending with kerosene, Gardner Pinfold reported that one refiner indicated that it uses low-sulphur diesel instead of kerosene in "exceptional circumstances" to produce winter-grade furnace oil. No other evidence contradicted the cloud point-based blending schedule and no party disputed its wide use.

[16] The Board finds that the cloud point-based schedule reproduced as Table 1 is a standard industry tool and concludes that the blending percentages in the schedule reasonably reflect refiners' actual blends for ULSD and furnace oil.

5 The Board's blending schedule generally aligns with industry blends

[17] The Board's existing blending schedule is reproduced in the report as Schedule A.1. Gardner Pinfold found that the Board's blending percentages for diesel and furnace oil align reasonably well with industry blending percentages.

[18] The report also identified differences between the Board's percentages and those used by industry. Mr. Gardner characterized these differences as "minor" in his oral testimony. The primary differences are that the Board's blending schedule specifies no kerosene blending in April and includes two percent biodiesel year-round, while the industry schedule indicates blends of up to 22% kerosene for both diesel and furnace oil and includes no biodiesel.

[19] Based on this, the Board concludes that its existing blending schedule is reasonably aligned with industry blends.

6 The proposed blending schedule better reflects industry blends

[20] Gardner Pinfold offered a new blending schedule for the Board's consideration as Table 2 of its report. The proposed schedule is a simplified version of the industry schedule in Table 1. It uses the average monthly blending percentages that correspond to whichever geographical zone has the lowest average cloud point temperature indication.

[21] Gardner Pinfold concluded that its proposed schedule aligns more closely with industry percentages than the Board's existing schedule. No party disputed that conclusion.

[22] Gardner Pinfold's proposed schedule is derived from the industry schedule and, therefore, addresses the differences outlined in Section 5 of this Decision. Further, the evidence does not support the inclusion of biodiesel in diesel and furnace oil blends. Mr. Gardner testified that there is no basis to include biodiesel in the blending schedule because neither of the responding refiners indicated that they blend biodiesel in New Brunswick. In Mr. Gardner's opinion, refiners would likely use a less expensive renewable fuel to comply with clean fuel regulations and, in any event, that cost is captured elsewhere in the pricing model.

[23] The Board finds that Gardner Pinfold's proposed blending schedule is a better representation of actual blends than the Board's existing blending schedule and concludes that the proposed schedule better satisfies the objective of establishing winter blending percentages that reasonably reflect actual blends.

[24] The Public Intervener did not support the proposed blending schedule because the retail price implications are unknown. He noted that kerosene is generally more expensive than ULSD and its price has spiked in the past.

[25] While the Board agrees that the price implications of the proposed blending schedule cannot be quantified at this time because they depend on the relative prices of ULSD and kerosene over time, Mr. Gardner characterized the impact as relatively minor because the Board's existing schedule is reasonably aligned with Gardner Pinfold's proposed schedule. Further, establishing a blending schedule based solely on the lowest price criterion would be contrary to the Board's objective described in Section 3 of this Decision.

7 The Board will adopt the proposed blending schedule

[26] For these reasons, the Board will adopt the proposed blending schedule set out in Table 2 of the Gardner Pinfold report. The schedule is attached as Appendix "A" to this Decision.

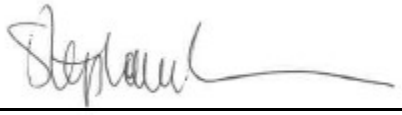
[27] The Oil Heat Association urged the Board to implement the proposed blending schedule for furnace oil after the heating season has ended, on April 1. Mr. Clark submitted that furnace oil retailers are experiencing challenging business conditions and a sudden change in product prices caused by a new blending schedule may negatively impact retailers' margins for several days until they adjust to the change. Mr. Clark expressed concern that retailers would be unable to recoup any such losses, particularly if the blending schedule change coincides with a spike in kerosene prices.

[28] While there is no evidentiary basis for expecting a significant or sustained increase in prices upon adopting the proposed schedule, the Board acknowledges the business challenges facing furnace oil retailers and will, therefore, delay implementing the new blending schedule for furnace oil until the heating season ends. The Board notes that the new schedule contemplates winter blending until April 30, 2024.

[29] The Board will apply the new blending schedule commencing March 15, 2024, when setting the benchmark price for ULSD and commencing May 1, 2024, when setting the benchmark price for furnace oil.

[30] The Board is aware that an updated cloud point-based blending schedule may be developed in the next year or two using more recent temperature data. The Board may review the winter blending percentages in the future.

Dated at Saint John, New Brunswick, this 7th day of March, 2024.



Stephanie Wilson
Vice-Chairperson

Christopher Stewart
Member

Heather Black
Member

APPENDIX A

Winter Blending Percentages

	ULSD		Furnace Oil	
Month	%ULSK NYH	%USLD NYH	%ULSK NYH	%USLD NYH
Jan	84.5	15.5	79.0	21.0
Feb	81.0	19.0	72.3	27.7
Mar	65.3	34.7	50.4	49.6
Apr	18.4	81.6	18.4	81.6
May	0.0	100.0	0.0	100.0
Jun	0.0	100.0	0.0	100.0
Jul	0.0	100.0	0.0	100.0
Aug	0.0	100.0	0.0	100.0
Sep	17.5	82.5	22.5	77.5
Oct	63.4	36.6	74.7	25.3
Nov	82.4	17.6	80.2	19.8
Dec	84.5	15.5	80.2	19.8