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Board of Commissioners of Public Utilities

2020 Review of the Costs of Supply and Distribution of
Maximum Price Regulated Petroleum Products in the
Province of Newfoundland and Labrador – Part B

May 19, 2020

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May 19, 2020

Dear Commissioners:

Re: 2020 Review of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador – Part B

We enclose our report of the findings and observations with respect to the 2020 Review of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador – Part B.

We would like to take this opportunity to thank the Board staff for their support throughout this engagement.

Yours sincerely,
Grant Thornton LLP



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1.0 Introduction

1.1 Purpose and scope

In 2012 the Board of Commissioners of Public Utilities (“the Board” or “the PUB”) engaged Grant Thornton LLP (the “Consultant” or “Grant Thornton”) to perform a study of the costs of supply and distribution of maximum price regulated petroleum products in the Province of Newfoundland and Labrador. The current review included updating the model established in 2012 to calculate the potential mark-up adjustment and recommendations regarding the process for future petroleum mark-up adjustments. As surveying industry participants posed significant challenges in 2012, this review heavily relied on publicly available data in the final pricing adjustment calculation.

To assist the Board in reviewing the current mark-up adjustments for regulated automotive fuels, we have been engaged to update the percentage cost-based model presented in our “2012 Study of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador – Part B” (“the 2012 Study”). The current review included the following:

Procedure	Section
Part B of this study is to include retail and wholesale pricing of automotive fuels	4
Reviewed the 2012 Study and considered potential revisions to the approach for application of current economic data	2/4/5
Reviewed The Petroleum Products Act	3/5
Reviewed Board Order - NO. P. P. 2 (2015)	3
Reviewed mechanisms and consulted with regulator staff (as necessary) in the following jurisdictions: <ul style="list-style-type: none"> Nova Scotia Utility and Review Board (“NSUARB”) PEI Regulatory & Appeals Commission (“IRAC”) New Brunswick Energy & Utilities Board (“NBEUB”) 	3
Researched market data for cost changes in the following economic data: <ul style="list-style-type: none"> Capital cost and depreciation, Fuel and operating costs, Insurance, Office, administration and other costs, Rent, Transaction fees, Utilities and communications, Wages and salaries, and Inflation 	4
Updated the percentage-based model (“PBM”) and calculated a potential mark-up allocation for Zone 1 – Avalon Peninsula (the “base zone”)	4
Reviewed and recommended the potential mark-up for premium automotive fuels	5
Calculated potential mark-up adjustments for both retail and wholesale participants	4
Performed sensitivity analysis of the results to assist the Board with understanding the range of potential outcomes	6

1.2 Restrictions and limitations

This report was prepared for the Board in relation to a study of the costs of supply and distribution of maximum price regulated petroleum products in the Province of Newfoundland and Labrador. This report is not to be used for any other purpose, and we specifically disclaim any responsibility for losses or damages incurred through use of this report for a purpose other than as described in this paragraph. This report should not be reproduced in whole or in part without our express written permission, other than as required by the Board in relation to the described purpose.

Our scope of work is as set out in our engagement letter dated December 9, 2019. The procedures undertaken in the course of our study did not constitute an audit of financial information and consequently, we do not express an opinion on any of the financial information contained in this report.

We acknowledge that the Board is bound by the Access to Information and Protection of Privacy Act ("Act") and agree that the Board may use its sole discretion in any determination of whether, and if so in what form, this report may be required to be released under this Act.

We reserve the right, but will be under no obligation, to review and/or revise the contents of this report in light of information which becomes known to us after the date of this report.

1.3 Assumptions

For the purposes of this report, we have assumed the following:

- 1) While the dollar values of cost categories could have changed for the industry participants, the general allocation of cost categories determined in the 2012 Study remain unchanged. As a result, the percent allocation of each cost category has been held consistent with the 2012 Study.
- 2) The industry supply chain information described in the 2012 Study has remained unchanged and is therefore included in this report for explanatory purposes. We have not undertaken procedures to validate that this information factually represents the current operations in the Province of Newfoundland and Labrador.
- 3) While several of the transaction fees will be updated, the credit card commission rate and percentage of usage described in the 2012 Study has remained unchanged.
- 4) For purposes of adjusting the premium automotive fuels mark-ups, the results of the unleaded 87 fuel mark-ups will be applied equally to each fuel type, to remain consistent with the 2012 Study.

1 **1.4 Summary of results**

2 The following table provides a summary of the resulting adjustments to the mark-up rates for regulated automotive
3 fuels. The details of our review have been outlined throughout the body of our report.

Gasoline Mark-Up Summary (in cents per litre)			
	Wholesale	Retail	Total
Opening Mark-Up (2012)	9.74	8.73	18.47
Increase (Decrease) for the period (2012 - 2020)	0.80	1.12	1.92
2020 Mark-Up	10.54	9.85	20.39
Diesel Mark-Up Summary (in cents per litre)			
	Wholesale	Retail	Total
Opening Mark-Up (2012)	9.16	12.48	21.64
Increase (Decrease) for the period (2012 - 2020)	0.80	1.12	1.92
2020 Mark-Up	9.96	13.60	23.56

4

5 Based on industry data and the application of the model from the 2012 Study, the PUB could consider applying the
6 mark-up adjustments of 0.80 cents per litre (“cpl”) and 1.12cpl to wholesale and retail margins respectively for all
7 regulated automotive fuels in Newfoundland and Labrador.

8 During our work we reviewed and compared how the price setting process for regular and premium automotive fuels
9 is completed in Newfoundland and Labrador with the other jurisdictions in Atlantic Canada (Nova Scotia, Prince
10 Edward Island and New Brunswick). We concluded that the Board could consider implementing minimum and
11 maximum wholesale and retail margin increases like the other reviewed jurisdictions when calculating their weekly
12 fuel prices.

13 Furthermore, our review of premium fuels for the other jurisdictions noted that they apply a consistent wholesale and
14 retail margin throughout each fuel type, unlike in Newfoundland and Labrador, where wholesale and retail margins
15 vary for each higher grade of fuel. Therefore, we have found that the PUB could consider adopting the approach used
16 in the other provinces to provide greater consistency between jurisdictions and improved clarity to industry
17 participants who provide premium fuels.

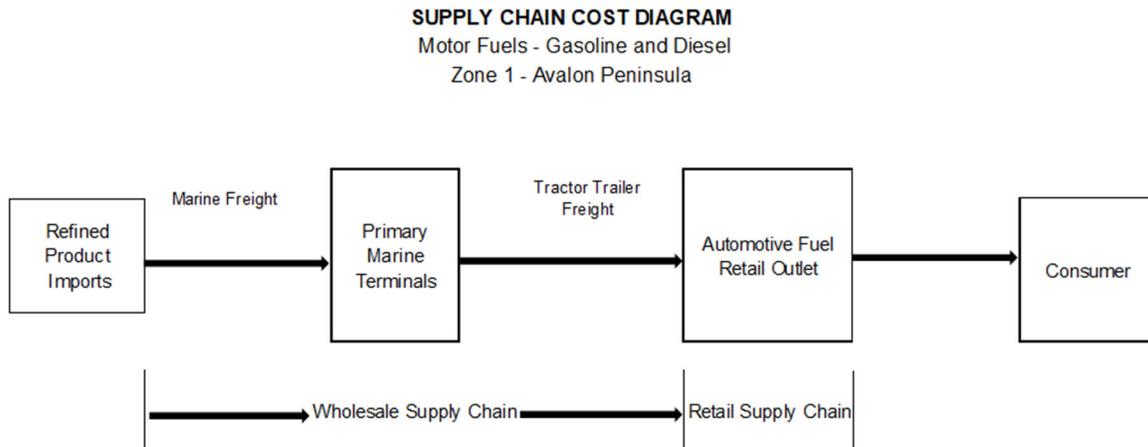
2.0 Industry overview

2.1 Base zone

Zone 1 – Avalon Peninsula (the “base zone”), consisting of a wholesale mark-up and a retail mark-up, was established by the Board during the 2005 Study. During the 2012 Study this base zone approach remained unchanged. We continue to apply this approach in the current study.

2.2 Understanding the businesses and supply chains

The following diagram reflects our understanding of the supply chain for automotive fuel storage and distribution in the base zone based on the 2012 Study:



Note - Obtained from A Study of Storage and Distribution Costs for Petroleum Products throughout Newfoundland and Labrador (David M. French and Associates Inc., May 2005)

- 1) **Wholesale supply chain:** The wholesale supply chain commences with refined automotive fuel transported via marine and tractor trailer freight to marine storage terminals and related bulk plants. These storage facilities mark the end of this supply chain.
- 2) **Retailer supply chain:** The retail supply chain commences with regulated automotive fuel delivered using the tractor trailer freight as mentioned above, which is then sold to the consumers. Businesses included within this point of the supply chain include Ultramar, Orange Store, Esso, and a variety of locally owned convenience stores with fuel available for sale.

The retail supply chain opening retail mark-up is straightforward given that only one point exists, unlike the wholesale supply chain. The wholesale mark-up however encompasses multiple points consisting of 1) marine freight, 2) marine terminals, and 3) tractor trailer freight. In order to allocate a portion of the wholesale mark-up to each point in the supply chain, a calculation was performed based on each wholesale supply chain point's cpl costs in proportion to the total wholesale supply chain cpl costs. The costs required for these calculations were obtained from the conclusions on the 2012 Study and applied as the opening mark-ups during our work.

3.0 Jurisdictional review

3.1 Overview

We reviewed the processes followed in other jurisdictions in Atlantic Canada regarding the retail and wholesale pricing of automotive fuels. This review consisted of the following procedures:

1. Reviewed the legislation in each jurisdiction;
2. Reviewed the information made publicly available by the regulator; and
3. Direct communication with regulator staff for clarification, as necessary.

3.2 Nova Scotia

In Nova Scotia the Nova Scotia Utility and Review Board (“NSUARB”) calculates the weekly price of gasoline and diesel for the province of Nova Scotia by following a series of steps. The process begins with the previous benchmark price which is equivalent to the average of the daily NYMEX market prices from the previous pricing period. The previous benchmark price is then adjusted by subtracting the net change in the NYMEX commodity pricing in both US and Canadian dollars. The result is the current benchmark price. If benchmark prices change throughout the period, this is mainly because of changes in the NYMEX market price or changes in the exchange rate. ¹ The following is an illustration of this calculation which was provided by NSUARB as of April 3, 2020:

New Benchmark Price (cpl)		
Inputs	Gasoline	Diesel
Previous benchmark price	18.75	40.03
Net change in NYMEX commodity price	2.12	(1.08)
Convert to CDN	(0.36)	(0.78)
Total	20.51	38.17

Once the new benchmark price has been set the wholesale selling price is determined based on a variety of adjustments. The following table illustrates the components. A description of each component has been provided on the next page.

Wholesale Selling Price (cpl)		
Inputs	Gasoline	Diesel
New benchmark price	20.51	38.17
Forward averaging correction (current week)	(1.30)	(1.70)
Add: Winter blending applied	-	-
Add: Transportation adjustment	0.60	0.60
Add: Cost of carbon	1.00	1.27
Add: Wholesale margin	6.65	6.65
Add: Federal excise tax	10.00	4.00
Add: Provincial motive fuel tax	15.50	15.40
Total	52.96	64.39

- **Forward averaging** - technique used to balance the interests of both the industry and the consumer, if necessary. It assists with obtaining fair and stable prices, as well as supply security. ²

¹Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 - <https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

² Forward Averaging Correction - https://nsuarb.novascotia.ca/sites/default/files/forward_averaging.pdf

- 1 ○ A forward averaging correction is not always necessary as stated above. However, to determine
2 the frequency and amount of a forward average, it must be based off the volatility in the commodity
3 market for refined gas/diesel fuel. It takes factors into account from historic petroleum markets such
4 as benchmark prices and cycles. For example, when the current benchmark price is greater than
5 the previous period(s), an adjustment is made in favor of the industry. Similarly, when the current
6 benchmark price is less than the previous period(s), an adjustment is made in favor of the
7 consumers.³
- 8 ○ Cases of high volatility levels typically reflect extraordinary supply and demand circumstances. For
9 these cases with extreme volatility, an incremental approach may be considered for the
10 adjustment.⁴
- 11 • **Winter blending price** - is the blending of diesel with additives (usually Kerosene) to ensure proper
12 operability during the colder months.⁵
- 13 • **Transportation** - the shipping costs incurred to move the product from the refinery to the retail station. As it
14 varies by zone, there are typically different transportation cost delivery rates for all six zones in Nova Scotia.
15 Therefore, a hearing is required to amend the amount per zone.⁶
- 16 ○ In the 2006 Decision, it was discussed that many difficulties were originating from the fact that
17 transportation costs were related to certain retail locations. This led to the suggestion of a better
18 determinant of zones. However, while it was concluded that no changes were necessary, it was
19 recommended that it would be best to set zone averages while allowing the option to deal with
20 remote locations through site specific applications.⁷
- 21 ○ In the 2011 Decision, a transportation allowance application was filed to propose an increase in the
22 allowance of all six zones in order to cover additional increased costs that had been incurred. As a
23 result, transportation allowances were approved in full, except that the request for a formulaic
24 adjustment mechanism (“FAM”) was denied.⁸
- 25 ○ Most recently, in the 2016 decision, an increase to transportation allowance of 0.1cpl was approved
26 across all zones. This decision was based on Irving’s position that the increase is warranted to
27 reflect the average increase in costs incurred across all six zones, since the NSUARB last adjusted
28 rates.⁹
- 29 • **Cost of carbon** - typically calculated through a series of formulas based around the consumption of
30 greenhouse gas emissions as depicted in the Cap-and-Trade and PPP regulations.¹⁰
- 31 • **Wholesale Margin** - difference between the provider (“Platts”) price and the wholesale price charged in the
32 province before transportation charges. It is the fixed amount included in the price with the purpose of
33 covering wholesaler’s costs while also permitting a reasonable profit.¹¹

³ Forward Averaging Correction - https://nsuarb.novascotia.ca/sites/default/files/forward_averaging.pdf

⁴ Forward Averaging Correction - https://nsuarb.novascotia.ca/sites/default/files/forward_averaging.pdf

⁵ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 -

<https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

⁶ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 -

<https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

⁷ Decision NSUARB-GAS-R-06 - <https://www.canlii.org/en/ns/nsuarb/doc/2006/2006nsuarb108/2006nsuarb108.pdf>

⁸ Decision NSUARB-GO-11-01 NSUARB-GO-11-02 -

<https://www.canlii.org/en/ns/nsuarb/doc/2011/2011nsuarb181/2011nsuarb181.html?searchUrlHash=AAAAAQASUGV0cm9sZXVtIFByb2R1Y3RzAAAAAAAE>

⁹ Decision 2016 NSUARB 168 - https://nsuarb.novascotia.ca/sites/default/files/Decision_6.pdf

¹⁰ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 -

<https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

¹¹ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 -

<https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

- 1 ○ In the 2006 Decision, a fixed wholesale price of 6.0cpl was set and remained constant until 2012.¹²
- 2 ○ In the 2012 Decision, an increase of 0.65cpl (approximately a 10.8% increase) was approved,
- 3 increasing the wholesale margin to 6.65cpl.¹³
- 4 • **Taxes** - The federal excise tax is the amount of tax set by the Canadian government and the provincial
- 5 motive fuel tax is the amount of tax set by the province of Nova Scotia.¹⁴

6 After the wholesale selling price is calculated, the retail margin and HST are added to achieve the final minimum and
7 maximum pump prices. The illustration below summarizes this final step as demonstrated by NSUARB:

Final Pump Price (cpl)				
Inputs	Gasoline		Diesel	
	Minimum	Maximum	Minimum	Maximum
Wholesale Selling Price	52.96	52.96	64.39	64.39
Add: Retail margin	5.10	7.00	5.10	7.00
Add: HST (15%)	8.71	8.99	10.42	10.71
Total	66.77	68.95	79.91	82.10

- 9
- 10 • **Retail margin** - amount allotted to the retail stations to allow operators to cover their costs while also
- 11 maintaining a reasonable profit.¹⁵ There is both a minimum and a maximum retail margin to allow for
- 12 flexibility and this can differ slightly for full-service verses self-service cases. Self-service is the typical
- 13 method in which the gas is pumped by the consumer whereas full-service entails having the gas pumped by
- 14 an attendant. Similarly, to other components, a hearing is required to make amendments to the differential
- 15 between full service and self-service options.¹⁶
- 16 ○ In the 2006 Decision, the minimum retail margin was established at 4.0cpl and the maximum was
- 17 set at 5.5cpl. It was also noted that full-service has an additional retail margin of 2.0cpl in
- 18 comparison to self-service.¹⁷
- 19 ○ In the 2011 Decision, the NSUARB re-examined the retail margins and approved an increase of
- 20 0.8cpl to minimum self and full-service mark-ups. They also applied an increase of 1.1cpl to the
- 21 maximum self-service mark-up.¹⁸
- 22 ○ In the 2016 Decision, they were adjusted again with an increase of 0.3cpl for minimum self and full-
- 23 service and an increase of 0.4cpl for maximum self-service. This brought the standard minimum
- 24 retail margin to 5.1cpl and maximum retail margin to 7.0cpl for self-serve and 7.5cpl for full-service.
- 25 At the time of our field work, the margins have not been adjusted since the 2016 decision.¹⁹
- 26 • **HST** - which is currently 15%, is added to both columns to determine a minimum and maximum pump
- 27 price.²⁰

¹² Decision NSUARB-GAS-R-06 - <https://www.canlii.org/en/ns/nsuarb/doc/2006/2006nsuarb108/2006nsuarb108.pdf>

¹³ Decision 2012 NSUARB 213 - <https://www.canlii.org/en/ns/nsuarb/doc/2012/2012nsuarb213/2012nsuarb213.pdf>

¹⁴ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 - <https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

¹⁵ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 - <https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

¹⁶ Decision NSUARB-GAS-R-06 - <https://www.canlii.org/en/ns/nsuarb/doc/2006/2006nsuarb108/2006nsuarb108.pdf>

¹⁷ Decision NSUARB-GAS-R-06 - <https://www.canlii.org/en/ns/nsuarb/doc/2006/2006nsuarb108/2006nsuarb108.pdf>

¹⁸ Decision 2011 NSUARB 181 - <https://www.canlii.org/en/ns/nsuarb/doc/2011/2011nsuarb181/2011nsuarb181.pdf>

¹⁹ Decision 2016 NSUARB 168 - https://nsuarb.novascotia.ca/sites/default/files/Decision_6.pdf

²⁰ Nova Scotia Utility and Review Board Petroleum Product Pricing Breakdown of Weekly Prices - Zone 1 - <https://nsuarb.novascotia.ca/sites/default/files/Petroleum%20Pricing%20Breakdown%20Apr%203-20.pdf>

3.3 Prince Edward Island

In Prince Edward Island the Island Regulatory & Appeals Commission (“IRAC”) includes the Petroleum Panel which is responsible for approving and utilizing the pricing “Methodology” to set petroleum prices. It is important to note that at the beginning of the pricing procedure, the Petroleum Panel first reviews several factors such as the following:²¹

- **Quantitative numbers** - include factors such as the daily price, the two-week average price and the year-to-date average price based on actual volumes of petroleum sold.
- **Qualitative factors** - include daily and weekly USA domestic inventory reports, Kent Marketing Report, MarketWatch and Bloomberg NYMEX prices, and commentary on petroleum prices, demand and supply, and other commentary - OPEC, Global issues, refinery shut-downs, and severe weather events impacting off-shore drilling, etc.

This analysis helps drive the changes to the pricing of petroleum products. The Petroleum Panel meets weekly to determine any changes that should be made to the price of gasoline, furnace oil and diesel fuel and determines the changes in the price of petroleum required. In setting the final price of all three petroleum products, the Petroleum Panel uses a set calculation which is adjusted up or down if other qualitative factors dictate that there should be an adjustment to the calculated price. To commence the numerical price calculation, the petroleum product pricing methodology for Prince Edward Island begins with the Charlottetown rack price. According to IRAC, the Charlottetown rack price is based on the NYMEX price adding a slight increase to form the basis of the refinery rack prices in PEI.²² IRAC monitors the Charlottetown wholesale rack price and the New York Harbour price on a daily basis. The Charlottetown rack price is used as the base cost for the calculation.²³

Once the rack price is known, the Petroleum Panel adjusts self-serve regular gasoline and diesel prices for the following (as of April 10, 2020):²⁴

Pump Price (cpl)				
Inputs	Gasoline		Diesel	
	Minimum	Maximum	Minimum	Maximum
Benchmark Price	28.40	28.40	45.50	45.50
Wholesale Margin	5.00	5.00	5.00	5.00
Federal Excise Tax	10.00	10.00	4.00	4.00
Provincial Excise Tax	8.47	8.47	14.15	14.15
Carbon Levy	6.63	6.63	8.05	8.05
Add: Retail margin	6.00	7.00	6.00	7.00
Add: HST (15%)	9.68	9.83	12.41	12.56
Total	74.18	75.33	95.11	96.26

- **Wholesale margin** - currently sitting at 5.0cpl for fuels to allow wholesale suppliers providing petroleum products to the island market a reasonable rate of return.
- **Taxes** - federal excise tax set by the Canadian government and provincial motive fuel tax is set by PEI.
- **Carbon levy** - reflects a carbon pollution price of \$20 per tonne of carbon dioxide equivalent in 2019, rising by \$10 per tonne annually to \$50 per tonne in 2022.²⁵
- **Retail margin** - currently has a range of 6.0 to 7.0cpl for self-serve and 6.0 to 10.5cpl for full-service for both fuels, to allow retailers on the island a reasonable rate of return.
- **HST** - which is currently 15%, is added to determine the final pump price.

²¹ Petroleum Product Pricing Methodology -

http://www.irac.pe.ca/document.aspx?file=Methodology/Petroleum_Product_Pricing_Methodology.htm

²² Frequently Asked Questions Petroleum Pricing - <http://www.irac.pe.ca/document.aspx?file=faq/documents/petrol-pricing-faq.asp>

²³ Petroleum Product Pricing Methodology -

http://www.irac.pe.ca/document.aspx?file=Methodology/Petroleum_Product_Pricing_Methodology.htm

²⁴ Petroleum Prices April 10, 2020 -

<http://www.irac.pe.ca/document.aspx?file=infocentre/documents/petroleumpriceseff200410.asp>

²⁵ Fuel Consumption Taxes in Canada - <https://www.nrcan.gc.ca/our-natural-resources/domestic-international-markets/transportation-fuel-prices/fuel-consumption-taxes-canada/18885>

3.4 New Brunswick

In New Brunswick the New Brunswick Energy & Utilities Board (“NBEUB”) is responsible for calculating and setting fuel prices (gasoline and diesel) for the region. They begin the process by calculating the maximum wholesale price. A summary of the steps to calculate the maximum self serve gasoline wholesale price are as follows (as of April 2, 2020):²⁶

Maximum Wholesale Price (cpl)	
Benchmark Price	19.65
Add: Wholesale margin	6.51
Add: Federal excise tax	10.00
Add: Federal fuel charge	6.63
Add: Provincial motive fuel tax	10.87
Add: HST (15%)	8.05
Total	61.71

- **Benchmark Prices** - based on the average prices in the international markets where the product is sold in significant volumes. For motor fuels the benchmark is based on the average New York Harbour Barge Price. The NBEUB calculates the weekly benchmark prices based on the average of the daily product prices for each week beginning Wednesday and concluding the following Tuesday.²⁷
- **Wholesale margin** - is added to the benchmark price. The maximum wholesale margin is 6.51cpl for each type of motor fuel in New Brunswick.²⁸ This maximum margin is based on the NBEUB considering specific factors, including the cost of transporting fuel from New York Harbour (or Sarnia) to New Brunswick, volume of sales, storage costs, inventory turnover rates and applicable levies and insurance costs.²⁹
- **Taxes:** New Brunswick charges federal excise tax, provincial fuel tax and HST. On April 1, 2019, the federal government implemented a carbon pricing system in provincial jurisdictions that do not have a carbon pricing system that aligns with the federal benchmark,³⁰ which was a federal fuel charge of 4.42cpl. As of April 1, 2020, NBEUB has updated their carbon pricing to 6.63cpl and provincial fuel tax to 10.87cpl.³¹

Once the maximum wholesale price has been determined, the next step is to find the maximum retail price. A summary of the components of the retail price is as follows:

Maximum Retail Price (cpl)	
Maximum Wholesale Price	61.71
Add: Retail margin	6.80
Add: Full-service charge (full-service only)	-
Add: HST on retail margin (15%)	1.02
Total	69.53

- The retailer can add a retail margin of 6.8cpl to the wholesale price. This margin is based on the NBEUB considering specific factors, including the cost of transporting fuel from New York Harbour (or Sarnia) to

²⁶ Past Petroleum Prices - <http://www.nbeub.ca/past-petroleum-prices>

²⁷ Petroleum Prices – Questions and Answers - <http://www.nbeub.ca/petroleum-prices-questions-answers>

²⁸ Petroleum Prices – Questions and Answers - <http://www.nbeub.ca/petroleum-prices-questions-answers>

²⁹ Decision June 28, 2011 - <http://pubweb.nbeub.ca/Documents/Decisions/Petroleum/20110628PPPADecisionE.pdf>

³⁰ Fuel Consumption Taxes in Canada - <https://www.nrcan.gc.ca/our-natural-resources/domestic-international-markets/transportation-fuel-prices/fuel-consumption-taxes-canada/18885>

³¹ Schedule for Changes to Maximum Prices, April 1, 2020 -

<http://www.nbeub.ca/uploads/Scheduling%20Changes%20PPPA%20-%20Apr%201%202020.pdf>

1 New Brunswick, volume of sales, storage costs, inventory turnover rates and applicable levies and
2 insurance costs.³²

- 3
4 • In the case of full-service gasoline, the retailer may also charge an additional full-service charge of 3.0cpl.
5 The HST is then applied to the retail mark-up to get the Maximum Retail Price.³³

6 Finally, after determining the maximum retail price, the last step is to add the delivery charge to determine the final,
7 maximum total price as shown below:

Maximum Total Price (cpl)	
Maximum Retail Price	69.53
Add: Delivery charge	3.00
Add: HST on delivery charge (15%)	0.45
Total	72.98

- 8
9 • The wholesaler may add a delivery charge to cover the cost of delivering petroleum to various parts of the
10 province. This delivery charge is up to 3.0cpl for motor fuels except in Grand Manan, where the delivery
11 charge is 5.0cpl.³⁴

³² NBEUB PPA Decision E June 28, 2011 - <http://pubweb.nbeub.ca/Documents/Decisions/Petroleum/20110628PPPADecisionE.pdf>

³³ Petroleum Prices – Questions and Answers - <http://www.nbeub.ca/petroleum-prices-questions-answers>

³⁴ Petroleum Prices – Questions and Answers - <http://www.nbeub.ca/petroleum-prices-questions-answers>

1 **3.5 Newfoundland and Labrador Board of Commissioners of Public Utilities (“PUB”)**

2 The PUB has been responsible for fuel-price regulation since 2004. Their role is essentially to establish the maximum
3 price at which regulated products may be sold in Newfoundland and Labrador. The PUB makes weekly maximum
4 price adjustments for petroleum products every Thursday at 12:01am which are determined using the average of the
5 New York Mercantile Exchange (“NYMEX”) data from the previous pricing period.³⁵

6 The Board receives pricing information daily from Platts Market scan in U.S. volumes and currency. These seven
7 data points represent the average of NYMEX commodity market data for the preceding seven-day period up to the
8 Tuesday of that week. This information is converted from U.S. gallons to litres and from U.S dollars to Canadian
9 dollars. The average of these figures for the period is then taken to arrive at the benchmark base for the current
10 period. Once the benchmark has been determined, it is included within the mark-up to achieve the base price. This
11 process is illustrated below for regular fuel as of April 2, 2020:³⁶

Base Price (cpl)	
Benchmark price for period	21.78
Add: Total allowed mark-up	18.47
Add: Full-service charge	-
Total	40.25

12 The total allowed mark-up is the amount set by the Board in cpl within Board Order No. P.P. 2(2015)³⁷ with the
13 objective of recovering costs incurred in the supply chain while also providing a reasonable allowance for return on
14 investment. These costs are broken out into wholesale and retail margin costs of 9.74cpl and 8.73cpl respectively.³⁸
15 Full-service charges would increase the retail margin costs by 2.61cpl, if offered by retailers for all grades of fuel. The
16 Board has the authority to determine the minimum and maximum mark up between the wholesale price to the retailer
17 and the retail price to the consumer of motor fuel.³⁹

18 Once the base price is determined, zone differentials are price increments added to the base prices for products in
19 the “base zone”, to reflect the additional costs for transportation, storage, and distribution. The “base zone” for motor
20 fuel in the province is Zone 1 (Avalon Peninsula). The amount of these differentials varies throughout the province
21 mainly due to the additional costs associated with transportation between zones.⁴⁰ Once zone differentials are
22 adjusted this is added to the base price excluding taxes as demonstrated below on the base price from April 2,
23 2020:⁴¹

Zone Differential (cpl)	
Base Price	40.25
Add: Zone differential	-
Total (Excluding Taxes)	40.25

³⁵ Board of Commissioners of Public Utilities – Petroleum Pricing Questions and Answers - <http://www.pub.nf.ca/ppoqa.htm>

³⁶ Board of Commissioners of Public Utilities – Petroleum Pricing Questions and Answers - <http://www.pub.nf.ca/ppoqa.htm>

³⁷ Board Order No. P.P. 2(2015) - <http://www.pub.nl.ca/orders/order2015/pp/pp2-2015.pdf>

³⁸ Board of Commissioners of Public Utilities – Petroleum Pricing Questions and Answers - <http://www.pub.nf.ca/ppoqa.htm>

³⁹ Chapter P-10.1 Petroleum Pricing Act - <https://www.assembly.nl.ca/Legislation/sr/statutes/p10-1.htm#4>

⁴⁰ Board of Commissioners of Public Utilities – Petroleum Pricing Questions and Answers - <http://www.pub.nf.ca/ppoqa.htm>

⁴¹ Board of Commissioners of Public Utilities – Petroleum Pricing Questions and Answers - <http://www.pub.nf.ca/ppoqa.htm>

1 The last adjustment to calculate the final pump price is the addition of applicable taxes. The following table illustrates
2 the final calculation of the pump pricing including taxes as of April 2, 2020: ⁴²

Pump Price (cpl)	
Pump Price (Excluding Taxes)	40.25
Add: Federal excise tax	10.00
Add: Provincial gasoline tax	16.50
Add: Carbon tax	4.42
Add: HST (15%)	10.68
Total	81.85

3

- 4 • **Federal excise tax** - is the amount of tax set by the Canadian government and is currently sitting at
5 10.00cpl for gasoline.
- 6 • **Provincial gas tax** - is set by the province of Newfoundland and Labrador and is currently 16.5cpl.
- 7 • **Carbon tax** - is set with the intention of reducing carbon dioxide and greenhouse gas emissions and is
8 currently set at 4.42cpl.
- 9 • **HST** - which is currently 15% in the province of Newfoundland and Labrador, is added to arrive at the total.

⁴² Board of Commissioners of Public Utilities – Petroleum Pricing Questions and Answers -
<http://www.pub.nf.ca/ppoqa.htm>

3.6 Results of the Jurisdictional Review

Based on our review of petroleum pricing procedures in the Atlantic Canadian jurisdictions we have noted the following similarities between jurisdictions for regular gasoline and diesel fuels:

- **Benchmark/Rack Prices** - all jurisdictions use similar methods to calculate their benchmark/rack price by applying some form of the NYMEX (i.e.: average, daily average, market prices).
- **Full-service charge** - based on our review of all the other jurisdictions this is a typical charge incurred when using full-service at automotive fuel retailers. In Nova Scotia and PEI, the margin is included within the minimum and maximum range. In Nova Scotia the full-service charge is included in the minimum of 5.1cpl and maximum of 7.5cpl range. In PEI the full-service charge is included in the minimum of 6.0cpl to a maximum of 10.5cpl range. In New Brunswick and Newfoundland and Labrador, the full-service charge is an additional 3.0cpl and 2.61cpl charge above the self-service charge respectively.
- **Taxes** - each jurisdiction applies the applicable taxes into their automotive fuel calculations (i.e. federal excise tax, provincial tax, carbon tax, and HST).

Below is a summary table of each jurisdiction's self serve gasoline price calculation (minimum prices where previously provided) and their differences compared to the others discussed:

Inputs	NSUARB (cpl)	IRAC (cpl)	NBEUB (cpl)	PUB (cpl)
	April 3, 2020	April 10, 2020	April 2, 2020	April 2, 2020
Benchmark/Rack price	20.51	28.40	19.65	21.78
Forward averaging correction (current week)	(1.30)	N/A	N/A	N/A
Add: Winter blending applied	-	N/A	N/A	N/A
Add: Wholesale margin	6.65	5.00	6.51	9.74
Add: Retail margin	5.10	6.00	6.80	8.73
Add: Transportation/Zone adjustment	0.60	-	3.00	-
Add: Cost of carbon	1.00	6.63	6.63	4.42
Add: Federal excise tax	10.00	10.00	10.00	10.00
Add: Provincial motive fuel tax	15.50	8.47	10.87	16.50
Add: HST (15%)	8.71	9.68	9.52	10.68
Total Price	66.77	74.18	72.98	81.85

- **NSUARB:**
 - **Forward averaging correction and winter blending applied** - techniques only applied in the province of Nova Scotia.
 - **Retail margin** - Nova Scotia applies a calculation for a minimum and maximum retail margin prices to be applied to the final fuel price, while the wholesale margin remains constant.
- **IRAC**
 - Transportation and storage costs are considered within automotive fuel across the province when calculating the wholesale and retail margins.
 - **Retail margin** - PEI implements a range (minimum and maximum) for the retail margin within the total fuel price, which is comparable to Nova Scotia's approach.
- **NBEUB**
 - In New Brunswick maximums for both wholesale and retail margins are calculated with no minimum.
- **PUB**
 - Transportation costs would be included within the zone differentials where required.
 - In Newfoundland and Labrador maximums for both wholesale and retail margins are calculated similar to New Brunswick with no minimum.
 - Wholesale and retail margins (inclusive of the transportation adjustment) in Newfoundland and Labrador are currently higher than all other jurisdictions in Atlantic Canada. The existing margins in Newfoundland and Labrador are approximately 13% and 49% higher than the margins reported in New Brunswick and Nova Scotia, respectively.

4.0 Part B model methodology

4.1 Overview

We reviewed the Part B methodology applied from the 2012 Study for the calculation of the wholesale and retail mark-ups. Our review and update consisted of the following:

1. Researched external market data for cost changes related to the cost allocation categories and components;
2. Applied price rate of change to each cost component related to automotive fuel; and
3. Updated the model to calculate a potential mark-up allocation for the base zone for wholesale and retail margins.

4.2 Cost allocation categories

The calculation of the mark-up is meant to account for a variety of operating cost categories incurred by the wholesalers and retailers. This report assumes that the cost categories have not changed since the 2012 Study was prepared. As a result, the cost categories we reviewed in this update included the following:

- Capital costs and depreciation
- Fuel and vehicle operating
- Insurance
- Office, administrative and other costs
- Rent
- Repairs and maintenance
- Utilities and communications
- Wages and salaries
- Inflation

Nothing has come to our attention which would suggest that the types of expenses incurred by industry participants has significantly changed since the 2012 Study.

4.3 Price rate of change based on external market data

For each of the cost allocation categories, we reviewed publicly available information to quantify the increase or decrease in costs that industry participants were reasonably expected to have experienced from 2012 to 2019.

Consistent with the 2012 Study, we have identified external data sources for fuel and vehicle operating, wages and salaries, and rent. All other cost categories are assumed to have increased at inflationary rates only. Each cost category is discussed in more detail in the following sections of this report.

1 **1) Fuel and vehicle operating**

2 Since tank wagons are diesel operated vehicles, we reviewed the PUB weekly maximum regulated pricing for motor
3 fuels to determine the change in diesel fuel prices since 2012.

	December 2012 (cpl)	December 2019 (cpl)	Rate of Change 2012 - 2019
Diesel	139.8 ⁴³	140.5 ⁴⁴	0.50%

4
5 Our calculation applied the increase of diesel fuel prices of 0.50% to the fuel and vehicle operating cost allocation
6 category. We recognize that vehicle operating costs include costs other than fuel. However, given that the total
7 vehicle operating costs category was not broken down into fuel and other we were unable to distinguish between the
8 two types of expenses. However, we have assumed that vehicle operating costs associated with the delivery of
9 regulated automotive fuels would largely be driven by fuel for the delivery trucks. This is consistent with the approach
10 that was adopted in the 2012 Study.

11 **2) Wages and salaries**

12 To consider the potential change in wages and salaries we have reviewed the employee wages by occupation Table:
13 14-10-0306-01 (formerly CANSIM 282-0151),⁴⁵ from Statistics Canada's Canadian socioeconomic database for the
14 following occupation categories; 1) office support occupations, and 2) trades, transport and equipment operators and
15 related occupations. The following table presents the increases in wages and salaries obtained from Statistics
16 Canada.

Wage Category	December 2012 (\$ wages / hr)	December 2019 (\$ wages / hr)	Rate of Change 2012 - 2019
Office support occupations	19.36 ⁴⁶	22.11 ⁴⁷	14.20%
Trades, transport and equipment operators and related occupations	23.38 ⁴⁸	27.25 ⁴⁹	16.55%
Average	21.37	24.68	15.49%

17
18 Therefore, our calculation applied the average percent increase of 15% to the wages cost allocation category.

⁴³ Board of Commissioners of Public Utilities - Maximum Retail Motor Fuel Prices – December 28, 2012 - http://www.pub.nf.ca/orders/ppo/fuel/Fuel_121228.pdf

⁴⁴ Board of Commissioners of Public Utilities - Maximum Retail Motor Fuel Prices – December 31, 2019 - http://www.pub.nf.ca/orders/ppo/fuel/Fuel_191231.pdf

⁴⁵ Statistics Canada. Table 14-10-0306-01

⁴⁶ Statistics Canada - Table: 14-10-0306-01 (formerly CANSIM 282-0151)

⁴⁷ Statistics Canada - Table: 14-10-0306-01 (formerly CANSIM 282-0151)

⁴⁸ Statistics Canada - Table: 14-10-0306-01 (formerly CANSIM 282-0151)

⁴⁹ Statistics Canada - Table: 14-10-0306-01 (formerly CANSIM 282-0151)

1 **3) Rent**

2 Using publicly available research reports from Cushman & Wakefield, a global commercial real estate services firm,
3 St. John's has shown the following rental rates per square foot change from 2012 to 2019.

	December 2012 (\$ price per sq ft)	December 2019 (\$ price per sq ft)	Rate of Change 2012 - 2019
Industrial space	11.75 ⁵⁰	11.38 ⁵¹	(3.15%)
Office space	30.21 ⁵²	34.26 ⁵³	13.41%
Average	20.98	22.82	8.77%

4
5 Our calculation applied the average percent increase of 8.77% to the rent cost allocation category. We acknowledge
6 that the quoted rental rates per square foot may not be reflective of the per square foot rental charges experience
7 outside of the metro region. However due to the availability of publicly available information regarding rental changes
8 we have applied this growth factor as a proxy for any pressures on this cost category in the province.

9 **4) Remaining cost allocation categories**

10 Consistent with the 2012 Study, we have assumed that all remaining cost categories have changed based on
11 inflation. Therefore, we have relied on The Bank of Canada ("BOC") inflation calculator to determine inflationary
12 increases for the period of 2012 to 2019. The inflation calculator uses monthly consumer price index ("CPI") data to
13 show changes in the cost of a fixed "basket" of consumer purchases.

	2012 (\$)	2019 (\$)	Rate of Change 2012 - 2019
Price per basket of goods	100.00 ⁵⁴	110.97 ⁵⁵	10.97% ⁵⁶

14
15 Our calculation applied the 10.97% rate of change for inflation from 2012 to 2019.

⁵⁰ Cushman & Wakefield – Marketbeat Industrial Snapshot – Q4 2013

⁵¹ Cushman & Wakefield – Marketbeat Office Snapshot – Q4 2019

⁵² Cushman & Wakefield – Marketbeat Industrial Snapshot – Q4 2013

⁵³ Cushman & Wakefield – Marketbeat Office Snapshot – Q4 2019

⁵⁴ Bank of Canada – Inflation Calculator - <https://www.bankofcanada.ca/rates/related/inflation-calculator/>

⁵⁵ Bank of Canada – Inflation Calculator - <https://www.bankofcanada.ca/rates/related/inflation-calculator/>

⁵⁶ Bank of Canada – Inflation Calculator - <https://www.bankofcanada.ca/rates/related/inflation-calculator/>

1 The following table summarizes the cost categories for the marine terminal and automotive fuel, and the price rate of
 2 change applied.

Cost Category	% of Total Cost (Marine Terminal)	% of Total Cost (Automotive Fuel Retailer)	% Price Rate Change
Capital costs and depreciation	58.73%	9.39%	10.97%
Fuel and vehicle operating	1.07%	0.23%	0.50%
Insurance	N/A	1.07%	10.97%
Office, administrative and other costs	14.03%	19.95%	10.97%
Rent	N/A	6.77%	8.77%
Repairs and Maintenance	11.51%	8.48%	10.97%
Utilities and Communications	0.81%	8.00%	10.97%
Wages and Salaries	13.85%	46.11%	15.49%
Total	100.00%	100.00%	

3 Based on the price rates of change above, the marine terminal percentage change and cpl margin increase impact
 4 from 2012 to 2019 was 12.78% and 0.44cpl respectively. Refer to the two tables below for the calculation of each
 5 figure:

Cost Category	2012 Cost cpl*	% Price Rate Change	2019 Cost cpl
Capital costs and depreciation	0.490	10.97%	0.544
Fuel and vehicle operating	0.010	0.50%	0.010
Insurance	N/A	10.97%	
Office, administrative and other costs	0.120	10.97%	0.133
Rent	N/A	8.77%	
Repairs and Maintenance	0.100	10.97%	0.111
Utilities and Communications	0.010	10.97%	0.011
Wages and Salaries	0.110	15.49%	0.127
Total	0.830	12.78%	0.936

6 *Figures taken from 2012 Study

Marine Terminal Opening Mark-Up (cpl)	% Price Rate Change	Margin Increase (cpl)
3.42	12.78%	0.44

7 4.4 Tractor trailer freight

8 Within the 2012 Study, a price rate change of 23% was applied based on survey information from the industry and
 9 extrapolated data. Surveying industry participants was outside the scope of our engagement, therefore, for the
 10 purposes of this report we have assumed that the tractor trailer freight has changed based on inflation from 2012 to
 11 2019 of 10.97%. The following table summarizes the price rate of change and cpl change within the PBM:

Model Input	Opening Mark-Up (Excluding Transaction Mark-Up) (cpl)	Price Rate of Change	Mark-Up Increase (cpl)
Tractor Trailer Freight	3.31	10.97%	0.36

4.5 Transaction fees

The 2012 Study included a transactions fee mark-up based on the credit card commission rate and percentage of credit card usage on the total price estimate of automotive fuel. As noted previously in our report, these assumptions from the 2012 Study remain constant for purposes of our calculations. We did however review the Canadian Federation of Independent Business guidance on April 2020⁵⁷ to validate that this assumption is reasonable based on current merchant rates that would be available to retail and wholesale participants in 2020. Below are the assumption inputs within our methodology:

	Transaction Fee Mark-up Inputs
Credit Card Commission Rate	1.64%
% Credit Card Usage	53%

As transaction fees have not changed since 2012 Study no further margin adjustment has been calculated for transaction fees, as it is already included in the opening mark-up figure within the model.

4.6 Automotive fuel model results (cpl)

The following tables present the currently approved opening mark-ups from Board Order No. P.P. 2(2015)⁵⁸ and the updated potential mark-up adjustments for both retail and wholesale participants using the updated PBM for the mark-up allocation for the base zone.

The following table demonstrates the wholesale 2020 mark-up adjustment based on industry information:

Wholesale (cpl)						
Model Inputs	% of Total Cost	Price Rate of Change	Marine Freight (Marine Terminals - Primary/Secondary/Depot)	Marine Terminal Operating Costs (Primary/Secondary/Depots)	Tractor Trailer Freight (Marine Terminal to Bulk Plants)	Total
Opening Mark-Up (Excluding Transaction Fee Mark-Up)			3.01	3.42	3.31	9.74
Marine Terminal % Input	100%	12.78%		0.44		0.44
Tractor Trailer Freight % Input	100%	10.97%			0.36	0.36
2020 Mark-Up Adjustment			-	0.44	0.36	0.80

We have assumed that there was no change in the marine freight charge which is consistent with the approach accepted in the 2012 Study.

⁵⁷ Canadian Federation of Independent Business - <https://www.cfib-fcei.ca/sites/default/files/pdf/5513.pdf>

⁵⁸ An Order of the Board No. P.P. 2(2015) - <http://www.pub.nl.ca/orders/order2015/pp/pp2-2015.pdf>

1 The following table demonstrates the retail 2020 mark-up adjustment based on industry information:

Retailers (cpl)			
Model Inputs	% of Total Cost	Price Rate of Change	Total
Opening Mark-Up (Excluding Transaction Fee Mark-Up)			8.73
Automotive Fuel Retailer % Inputs			
Capital Costs and Depreciation	9.39%	10.97%	0.09
Fuel and Vehicle Operating	0.23%	0.50%	0.00
Insurance	1.07%	10.97%	0.01
Office, Administrative and Other Costs	19.95%	10.97%	0.19
Rent	6.77%	8.77%	0.05
Repairs and Maintenance	8.48%	10.97%	0.08
Utilities and Communications	8.00%	10.97%	0.08
Wages and Salaries	46.11%	15.49%	0.62
2020 Mark-Up Adjustment	100.00%		1.12

2 The following table demonstrates the 2020 mark-up adjustments summary for both the wholesale and retail margins
 3 based on industry information:

Gasoline Mark-Up Summary (cpl)			
	Wholesale	Retail	Total
Opening Mark-Up (2012)	9.74	8.73	18.47
Increase (Decrease) for the period (2012 - 2020)	0.80	1.12	1.92
2020 Mark-Up	10.54	9.85	20.39
Diesel Mark-Up Summary (cpl)			
	Wholesale	Retail	Total
Opening Mark-Up (2012)	9.16	12.48	21.64
Increase (Decrease) for the period (2012 - 2020)	0.80	1.12	1.92
2020 Mark-Up	9.96	13.60	23.56

4
 5 **Based on our PBM calculations and industry information, the Board could apply the 0.80cpl and 1.12cpl**
 6 **mark-ups to the wholesale and retail margins respectively for all regulated automotive fuels within**
 7 **Newfoundland and Labrador, assuming no change within the current methodology.**

5.0 Premium grades of automotive fuel

5.1 Overview

Further to our work around each jurisdiction's regular fuel and diesel price setting process, we additionally reviewed how each jurisdiction completes their mark-up of premium fuels compared to Newfoundland and Labrador.

5.2 Other Jurisdictions in Atlantic Canada

Based on our review of the petroleum pricing process in Nova Scotia, New Brunswick and Prince Edward Island we have found that the mark-up on premium fuels is consistently applied in the price setting process as described earlier in our report (i.e. consistent wholesale and retail margin increases and tax impacts), in addition to initial mark-ups on the benchmark price for premium fuels. The below table provides these increases set within each jurisdiction for their first weekly fuel increase for April 2020:

Fuel Type	NSUARB ⁵⁹		IRAC ⁶⁰		NBEUB ⁶¹		PUB	
	Benchmark Price (cpl)	Increase (cpl)						
Regular	20.51		26.4		19.7		21.78	
Mid-Grade	23.51	3.0	29.9	3.5	22.7	3.0	24.78	3.0
Premium	26.51	6.0	33.3	6.9	25.7	6.0	27.78	6.0

During our work we reviewed several weekly benchmark increases to ensure the mark-ups on premium fuels were consistent and we found no discrepancies.

5.2.1 Nova Scotia

As part of our jurisdictional review, we considered why margins are held constant between grades of gasoline. When we inquired of the NSUARB we were advised that they had not been asked to look at or adjust margin differences between the grades of gasoline or product in general. We understand that when regulations were put into place in Nova Scotia (2006) the unregulated market typically saw the difference between regular and mid-grade at 3 cents, then another 3 cents to premium. NSUARB also noted that when margins were set there was wide industry consultation and the concept of margin differences between the grades of gasoline was not brought up then, or since.

⁵⁹ Schedule "A" Prices Prescribed for Petroleum Products under the Petroleum Products Pricing Act and the Petroleum Products Pricing Regulations effective on and after 12:01 a.m. on April 3, 2020 - <https://nsuarb.novascotia.ca/sites/default/files/gasprice%20effective%20April%203%202020.pdf>

⁶⁰ Petroleum Prices April 3, 2020 - <http://www.irac.pe.ca/document.aspx?file=petrol/currentprices.asp>

⁶¹ New Brunswick Petroleum Prices - <http://www.nbeub.ca/past-petroleum-prices>

1 5.2.2 Prince Edward Island (“PEI”)

2 When we considered the treatment in PEI we reviewed Order PC19-003⁶² from December 19, 2019. In this order, the
 3 core issue before the Commission was whether the current retail margins for gasoline and diesel fuel were justified or
 4 if a change was warranted. In this order IRAC considered a submission from a group of retailers, responses to
 5 questionnaires from 37 retailers in the province, and sensitivity analysis performed by Commission staff and their
 6 external accounting firm. In addition, IRAC considered evidence filed in New Brunswick (“NB”) by way of the Gardner
 7 Pinfold Consultants Inc. report (the “Garner Pinfold report”). The Commission found that the financial information that
 8 was provided by PEI retailers was very similar to the information disclosed by the NB retailers and summarized in the
 9 Gardner Pinfold report. As a result of this review, IRAC determined that the following retail margins for gasoline and
 10 diesel was warranted:

	Regular (cpl)		Mid-grade (cpl)		Premium (cpl)		Diesel (cpl)	
	Min	Max	Min	Max	Min	Max	Min	Max
Self-serve	6.0	7.0	6.0	7.0	6.0	7.0	6.0	7.0
Full-serve	6.0	10.5	6.0	10.5	6.0	10.5	6.0	10.5

11
 12 When we inquired of IRAC we were advised that during their review nothing came to their attention which would
 13 suggest that retail margins should vary by grade of fuel.

14 5.2.3 New Brunswick (“NB”)

15 When we inquired of the NBEUB, we were advised that mark-ups between regular, mid-grade and premium gasoline
 16 are set by regulation, specifically subsection 4(1) of NB Regulation 2006-41⁶³. As such the NBEUB has no authority to
 17 make changes to the regulatory mark-ups. That authority resides with the Lieutenant-Governor in Council (i.e. the
 18 provincial Cabinet). NBEUB noted that they had not been asked to look at or adjust margin differences between the
 19 grades of gasoline or product in general. We reviewed NBEUB decision 03855 and found that whether the retail
 20 margin should vary between fuel grades was not the subject of this review.

21 5.2.4 Summary results

22 The following table summarizes the margins by fuel grade in each of the Provinces in Atlantic Canada and compares
 23 those margins to the margins currently in place in Newfoundland and Labrador.

	Regular (cpl)	Mid-grade (cpl)	Premium (cpl)
NSUARB⁶⁴			
Wholesale margin	6.65	6.65	6.65
Retail margin	5.10	5.10	5.10
IRAC⁶⁵			
Wholesale margin	5.00	5.00	5.00

⁶² <http://www.irc.pe.ca/Orders/Petroleum/2019/Order-PC19-003.pdf>

⁶³ <https://www.gnb.ca/0062/acts/BBR-2006/2006-41.pdf>

⁶⁴ Schedule “A” Prices Prescribed for Petroleum Products under the Petroleum Products Pricing Act and the Petroleum Products Pricing Regulations effective on and after 12:01 a.m. on April 3, 2020 - <https://nsuarb.novascotia.ca/sites/default/files/gasprice%20effective%20April%203%202020.pdf>

⁶⁵ Petroleum Prices April 10, 2020 - <http://www.irc.pe.ca/document.aspx?file=infocentre/documents/petroleumpriceseff200410.asp>

	Regular (cpl)	Mid-grade (cpl)	Premium (cpl)
Retail margin	6.00	6.00	6.00
NBEUB⁶⁶			
Wholesale margin	6.51	6.51	6.51
Retail margin	6.80	6.80	6.80
NL-PUB⁶⁷			
Wholesale margin	9.74	8.35	6.96
Retail margin	8.73	9.73	10.73

5.3 Newfoundland and Labrador Board of Commissioners of Public Utilities (PUB)

Based on our review of the PUB's mark-up process on premium fuels, we noted several similarities and differences in how they calculate the final pump prices compared to the other jurisdictions. The below table and notes provide the pump prices as of April 2, 2020:⁶⁸

	Regular Unleaded (cpl)	Mid-Grade (cpl)	Premium (cpl)
Benchmark Price	21.78	24.78	27.78
Wholesale Margin	9.74	8.35	6.96
Retail Margin	8.73	8.73	8.73
Subtotal	40.25	41.86	43.47
Fed Excise Tax	10.00	10.00	10.00
Prov Tax	16.50	16.50	16.50
Carbon Tax	4.42	4.42	4.42
Retail Margin Increase	-	1.00	2.00
HST (15%)	10.68	11.07	11.46
Pump Prices (cpl)	81.85	84.85	87.85

- **Benchmark Prices** - benchmark increases for the premium fuels are similar process as the other jurisdictions and in accordance with the Petroleum Pricing Regulations.⁶⁹
- **Wholesale Margin** - unlike the other jurisdictions, the PUB applies a lower wholesale margin increase for both the mid-grade and premium fuels.
- **Retail Margin** - remaining consistent throughout all fuels, except the noted increase below.
- **Taxes** - remaining consistent throughout all fuels.
- **Retail Margin Increase** - unlike the other jurisdictions, the PUB applies a separate increase to each premium fuel to increase retail margins.
- **HST** - remaining consistent throughout all fuels at 15%.

Based on our review of the premium fuel mark-ups for each jurisdiction, the PUB could adopt processes in line with the other jurisdictions previously discussed, such as having a consistent wholesale and retail margins throughout each fuel type.

⁶⁶ Past Petroleum Prices - <http://www.nbeub.ca/past-petroleum-prices>

⁶⁷ Maximum Retail Motor Fuel Prices Effective 12:01a.m., Thursday, April 2, 2020 - http://www.pub.nl.ca/orders/ppo/fuel/Fuel_200402.pdf

⁶⁸ Maximum Retail Motor Fuel Prices Effective 12:01a.m., Thursday, April 2, 2020 - http://www.pub.nl.ca/orders/ppo/fuel/Fuel_200402.pdf

⁶⁹ Petroleum Products Regulations under the Petroleum Products Act - <https://www.assembly.nl.ca/Legislation/sr/regulations/rc010079.htm>

1 6.0 Sensitivities

2 6.1 Range of potential mark-up adjustments

3 To provide the Board with some context of the impact of changes to the external market data regarding price changes
4 we have performed some sensitivity calculations. For these calculations, we adjusted the price rate of change
5 assumptions +/- 10% from the price rate of change that was calculated based upon the externally available market
6 data. The results of this analysis are summarized in the table below in cents per litre:

Sensitivities	-10%	Calculated	+10%
Marine Terminal	0.40	0.44	0.48
Tractor Trailer Freight	0.33	0.36	0.40
Automotive Fuel Retailer	1.01	1.12	1.24
Total Mark-Up Increase (cpl)	1.74	1.92	2.12

7

7.0 Conclusions and recommendations

Our review and update of Part B of the 2012 Study has resulted in the following conclusions and recommendations:

- We have concluded that the PUB could consider applying the potential mark-up adjustments below to wholesale and retail margins for all regulated automotive fuels within Newfoundland and Labrador, which are supportable by external market data and continuing assumptions from 2012 Study.

Gasoline Mark-Up Summary (cpl)			
	Wholesale	Retail	Total
Opening Mark-Up (2012)	9.74	8.73	18.47
Increase (Decrease) for the period (2012 - 2020)	0.80	1.12	1.92
2020 Mark-Up	10.54	9.85	20.39

Diesel Mark-Up Summary (cpl)			
	Wholesale	Retail	Total
Opening Mark-Up (2012)	9.16	12.48	21.64
Increase (Decrease) for the period (2012 - 2020)	0.80	1.12	1.92
2020 Mark-Up	9.96	13.60	23.56

- The above table suggests that an approximate increase of 10.4% for gasoline and 8.9% for diesel (for both wholesale and retail) could be justified based on market changes from the 2012 Study to this report. However, comparatively margins in Newfoundland and Labrador are higher than the other three Atlantic jurisdictions.
- Based on the review of the selected jurisdictions fuel pricing processes, the PUB could consider adopting similar methods whereby they provide a minimum and maximum wholesale and retail price margins for their weekly automobile fuel prices update.
- Update premium fuel adjustment process to be in line with other jurisdictions, whereby the PUB ensures both wholesale and retail margins are consistent for each grade of automotive fuel.



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