Grant Thornton

An instinct for growth™

Board of Commissioners of Public Utilities

2012 Study of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador (Summary Report)

Part A

February 13, 2013

Contents

Restrictions and Limitations

This report is confidential. It was prepared for the Board of Commissioners of Public Utilities (the "Board") in relation to a study of the cost 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. 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 Freedom of 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.

Purpose and Scope of the Study

Purpose and Scope

The Board engaged Grant Thornton LLP (the "Consultant" or "Grant Thornton") to perform a study of the cost of supply and distribution of maximum price regulated petroleum products in the Province of Newfoundland and Labrador (the "Study"). The Study consists of two parts, Part A and Part B. The following discussion details the purpose and scope of Part A of the Study, which is the focus of this report.

The Board has requested Grant Thornton develop a truck based cost model to determine cost on a cents per litre ("CPL") basis for the delivery of maximum price regulated heating fuels ("regulated heating fuels") consisting of furnace oil, stove oil and propane. The model is intended to serve the following purposes:

1. Determine total allowed mark-up and allowed wholesale mark-up to be used in the pricing of regulated heating fuels.

2. Identify, classify and quantify costs of distribution as either wholesaler function costs or retailer function costs.

3. Include methodology for determining reasonable profit to wholesalers that will be included in a wholesaler mark-up and reasonable profit to retailers that will be included in total allowed mark-up for regulated heating fuels.

4. Be dynamic and easily updated to reflect current costs of conducting the business of delivery of regulated heating fuels to consumers.

Part A of the Study was conducted for the base pricing zones for regulated heating fuels.

Methodology

To develop the proposed truck based model, a planning phase was conducted, followed by a four step methodology to obtain, develop and model industry cost data. The first step was to obtain cost data for the supply and distribution of regulated heating fuels. Once cost data was obtained, a database was developed to accumulate survey participant results that would subsequently assist in analysis and trending of supply and distribution cost data. Step three involved presenting database results to industry participants for clarification and feedback to ensure data submitted was complete and captured as intended by the survey participant. In the final step, preliminary model designs were conceived and refined using inputs derived from database analysis and trending of cost data accumulated in the database. The following discussion describes this approach in more detail.

Execution of Part A of the Study

Step 1: Obtain Cost of Supply and Distribution Data

To obtain cost data, one of two approaches could be applied. One approach was a financial projection based methodology using assumptions to develop cost of supply and distribution data which could then be used as inputs into a truck based model. An alternative approach was a survey based technique designed to collect cost of supply and distribution information from actual industry participants. Working in consultation with the Board, Grant Thornton chose to use a survey based approach to obtain cost data. The intention and rationale for use of the survey technique was to gain, to the best extent possible, an actual result based picture of what industry players deemed to be their costs of business to supply and distribute regulated heating fuels.

A. Survey Sample

The sample selection was a judgment based approach applied to a known body of industry participants. During the planning phase, Grant Thornton gained an understanding of industry participants and obtained lists of businesses involved in the supply and distribution of regulated heating fuels in the base pricing zone. In analyzing the population to be surveyed, the intent of Grant Thornton was to include as comprehensive and diverse a group as possible in the sample. Suppliers of all sizes and business types, from the small home based business to large multi operational petroleum product companies, were included in the survey sample group. It was determined that three main types of businesses operate in the supply and distribution of regulated heating fuels as follows:

1. **Large diversified petroleum companies:** In addition to supplying and distributing regulated heating fuels, these companies provide several other regulated and non regulated petroleum, energy and other business products and services. Examples of these companies include, Irving, Ultramar and North Atlantic.

2. **Medium to large pure play companies:** These companies have medium to large scale supply and distribution operations and focus a large portion of their operations on the delivery of regulated and non regulated heating fuels to consumers. An example of such a company is Harvey's Oil Limited.

3. **Small pure play business operators:** These include small business operators owning single or few assets used in the supply and distribution of regulated heating fuels. These businesses may be incorporated or sole proprietors and can have formal business premises as well as operate administration of the business from a home. An example of such a company is Skinners Oil.

With this understanding of industry participants in place, a sample of data contributors that would be surveyed in the base pricing zone was selected as follows:

Table 1: Survey Participants

Business Type	Data Contributor
Large diversified petroleum companies	Irving
Large diversified petroleum companies	North Atlantic
Large diversified petroleum companies	Ultramar
Medium to large pure play companies	Harvey's Oil Limited
Medium to large pure play companies	Superior Propane
Small pure play companies	A1 Fuels
Small pure play companies	Blue Water Newfoundland Limited
Small pure play companies	Chafe's Oil Distributers
Small pure play companies	Robert Hayward & Sons Limited
Small pure play companies	Skinners Oil

Western Petroleum was a further participant that contributed data for western portions of the Avalon Peninsula outside the scope of the base zone. Information obtained from Western Petroleum is not presented in Part A of the Study but it was examined and compared for consistency with the base zone industry participant feedback and results discussed in this report.

B. Survey Data Template Design

During the sample selection process, a comprehensive truck based survey template was developed by Grant Thornton using industry knowledge acquired during the planning phase of the Study. This survey was designed to gain a comprehensive picture of assets, operating costs and office support and other costs incurred in the supply and distribution of regulated heating fuels for the years 2010 and 2011 (see Appendix A which illustrates the survey template used in the Study).

C. Survey Distribution

On May 18, 2012 an information and discussion session was held to review the data reporting forms with participants; address any questions that may arise; ensure a complete understanding of the information reporting requirements; and facilitate reasonable uniformity of data returns amongst participants. Subsequent to the information session, surveys were distributed electronically to industry participants and responses were requested to be received in the same electronic format. In certain circumstances, where electronic communication was not typically used by a participant, surveys were mailed or disbursed in a hardcopy form. The goal of an electronic disbursement and receipt process was to obtain data in a format that could be transferred into a database in a more efficient and timely nature than would be the case with manually inputting hardcopy responses. Upon distribution of the survey periodic follow ups were conducted with participants to facilitate receipt of the surveys and provide any assistance and answers to questions regarding survey completion.

Step 2: Database Development and Accumulation of Data

After distribution of surveys, a database was created to accumulate survey data from the participant sample. The database was developed in Microsoft Excel using standard data field descriptors to input and describe survey data.

Once the database was designed, data was added as surveys were received from sample participants. Each data line received was input with descriptors determined from the survey template. These descriptors consisted of both standardized drop down menu items as well as customizable field descriptions which could be used as required. This provided a dynamic set of data descriptions which could be used to analyze, query and sort data. While more sophisticated database software could have been used, Excel spreadsheet functionality was used with the intent of developing modelling data that was easily updated, which was a key consideration requested by the Board to be implemented where possible when developing a model methodology. Excel was also an appropriate choice for the creation of the database, as it contains various user friendly customizable and intuitive sorting and pivot table options. Such functions can be used to actively analyze the data for the purposes of modelling.

Step 3: Survey Participant Meetings and Feedback

After the database was accumulated, contributor costs were summarized and subsequently presented to survey participants in individual meetings. The data presented in these meetings summarized results in both total dollars and CPL derived formats. Meetings focused on reviewing results with participants and further investigating and clarifying any issues in survey responses such as missing or incomplete

data, duplicate data and any ad hoc analysis and assumptions that participants provided with their survey submissions. This feedback process was important to ensure that costs and litres delivered data were captured within the database as intended by the survey participants.

Step 4: Data Analysis and Model Development

With participant meetings completed and feedback incorporated into the survey results, the database was complete for final analysis and interpretation in order to generate inputs for modelling purposes. The following section details the database analysis, interpretation and model development.

Survey Data Results, Analysis, Interpretation and Model Development

Base Zone

The survey methodology previously described was conducted on the current base zones established by the Board for regulated heating fuels. For furnace oil and stove oil, the base zone is Avalon North East ("Zone 1ANE"). For propane, the established base zone is Burin Peninsula/Bonavista Peninsula ("Zone 2"). However based on an understanding of truck based operations obtained from previous supply chain studies, propane costs were understood to be incurred equivalently across all established pricing zones. Thus for purposes of conducting Part A of the Study, propane data was also requested from Zone 1ANE to gather data in a complete format for all maximum regulated heating products distributed in Zone 1ANE.

Survey Data Results

Survey data collection and accumulation of the database was completed over the period June 2012 to January 2013. The following commentary discusses the challenges of conducting the survey and obtaining the final database.

Challenges Faced During the Survey and Data Collection Process

1. Timeliness of Survey Responses

Background: Surveys were distributed in early June of 2012. Final responses were received in January 2013 which was an eight month period of endeavouring to receive data from the participants and several months behind the targeted response date of June 29, 2012. Several companies selected to participate in the survey failed to provide a response.

Addressing the Challenge: Periodic follow up continued to be performed working with participants to explain the purpose and importance of their input and to encourage them to respond at the earliest opportunity. This goodwill and persistence was effective in obtaining responses from most of the survey sample. For non responders the importance of the survey was repeated and response was encouraged. Non responders continued to be pursued into late January 2013. However with these efforts completed, a final decision was made to accept the data received as of January 30, 2013 as the

data set that would be used in subsequent modelling. Efforts to obtain submissions from the small pure play companies were not successful. The majority of these companies noted that they could not easily access the information requested and with such limited staff resources, obtaining such information would be extremely time consuming. As a result, attempts were made to meet with management of the small pure play companies individually. The purpose of these meetings was to gain insight into their business operations and how their business has changed, including their operating costs, since the last study of the costs of supplying and distributing regulated heating fuels in 2005. Common themes resulting from these meetings focused around the increased costs of operating in the distribution of regulated heating fuels. Management noted that it continues to be difficult to get employees given the strength of the Newfoundland and Labrador marketplace, which has resulted in increased wages to attract and retain staff. Increased wages in the region have also resulted in higher repairs and maintenance costs for servicing their tank wagons. Management also noted that fuel costs, which are a significant cost of their operations, continue to increase year over year. The increased use of credit cards by customers has also resulted in increased administrative fees each year.

The following table summarizes the response statistics for the sample:

Table 2: Survey Sample Response

Sample Data Contributor	Primary Survey Sent	Submission Received	Comments	Price Information Request Sent	Submission Received
Harvey's Oil Limited	June 4, 2012	June 29, 2012	NA	January 3, 2013	January 9, 2013
Irving	June 4, 2012	July 4, 2012	NA	January 3, 2013	January 9, 2013
Ultramar	June 4, 2012	July 11, 2012	NA	January 3, 2013	January 22, 2013
North Atlantic	June 4, 2012	August 20, 2012	NA	January 3, 2013	January 30, 2013
Superior Propane	June 4, 2012	January 18, 2013	NA	January 3, 2013	January 18, 2013
A1 Fuels	June 4, 2012	None	NA	NA	NA
Blue Water Newfoundland Limited	June 4, 2012	None	NA	NA	NA
Chafe's Oil Distributers	June 4, 2012	See comment	Meeting held with management	NA	NA
Robert Hayward & Sons Limited	June 4, 2012	See comment	Submission with limited information provided	NA	NA
Skinners Oil	June 4, 2012	See comment	Meeting held with management	NA	NA

2. Survey Completion Challenges – Ad hoc Submissions and Combined Costs

Background: In certain cases, surveys were submitted with supplementary overhead schedules provided as an appendix. They were also submitted many times with data combined across both zones and regulated heating fuel product types. For example, rather than complete a Section 9 cost worksheet for a specific zone such as Zone 1ANE, zone costs were submitted for a combined group of zones (e.g. 1ANE, 1ANW and 1AS). Also, such costs were not separated into specific heating fuel types such as furnace oil, stove oil and propane. This posed a challenge in attaching specific descriptors to costs for input into the database.

Addressing the Challenge: A litres delivered weighting calculation was performed in order to allocate combined costs to a specific zone and product type. Using data provided in Sections 3, 4 and 5 of the survey, a weight could be determined for each product and zone which was then applied to the total combined cost. This weighting approach was also used for supplementary overhead schedules submitted with surveys. This methodology was communicated to participants in follow-up meetings to ensure that in absence of other identified methods of allocation, this weighting approach was the most appropriate alternative in order to separate costs for a specific zone and product type.

3. Allocation of Commissions

Background: Where heating fuel distribution was carried out by commissioned agents, there were instances where total commission costs presented in the survey provided no further information on the underlying cost drivers of the commissions.

Addressing the Challenge: Certain survey responses provided both commissions paid and the underlying truck costs that agents incurred to earn the commissions. In those cases, the commissions were allocated to specific cost categories based on a weight of each of a particular agent cost incurred to the total agent cost. This facilitated creating more detailed cost descriptors for the payment of such commissions. For those surveys that provided commission costs only, a similar analysis of agents underlying truck costs was subsequently requested from the sample participant. Reallocations were then performed using the weighting methodology previously described.

4. Presenting Data in Cents Per Litre

Background: Data submitted in the surveys was not directly expressed in CPL by survey participants. Given an objective of the Board is to express data and model results in CPL format, data conversions needed to be performed and presented to survey participants.

Addressing the Challenge: Data submitted in Section 8 and Section 9 of the survey was converted into CPL data by using litres delivered data of Sections 3, 4 and 5 of the survey applied to cost allocations established using the weighting approach described in Challenge 2. This generated data in a CPL format which was presented to industry participants in individual meetings in order to validate reasonableness of the CPL data extrapolated from the survey.

With survey data challenges addressed and results evaluated in meetings with survey participants, a database now existed with industry validated cost data. This database was then used for analysis, interpretation and model development.

Data Analysis, Interpretation and Model Concept Development

Initial model concepts envisioned obtaining survey data, in an absolute value CPL format, across wholesale and retail supply chain points. The next step involved determining a mark-up on such data that produced a result that contained a reasonable return on investment. These concepts surrounded a one size fits all methodology in regards to model inputs such as costs, returns on investment and the mark-ups which would achieve such return on investment. The first concepts of a model expected to be generated from the survey data included the following:

Cost + Reasonable Return on Investment = Mark-up

Inputs to the model were initially anticipated to be CPL costs of storage and distribution obtained from the survey database and return on investment determined from an industry standard of common asset investment for the survey participants.

However, initial analysis of the final survey data obtained soon diminished the viability of preliminary concepts for a model. The surveys revealed that participants greatly varied in scale and business models used for the delivery of heating fuels. It was quickly realized that companies ranging from large multi faceted energy companies to home based single asset operations did not incur costs of storage and delivery consistently. The following tables present regulated heating fuel costs and litres delivered data obtained from participant surveys, along with absolute value CPL costs derived from the data:

Table 3: 2010 Regulated Heating Fuel Survey Results for Zone 1ANE (Furnace and Stove Oil)

Financial Type	Cost ($)	Cents Per Litre Delivered
Total Operating Cost	2,179,569	4.21
Total Office Support and Other Costs	4,375,399	8.46
Total Costs	6,554,968	12.68
Fuel Litres Delivered per Year		51,715,140

Table 4: 2011 Regulated Heating Fuel Survey Results for Zone 1ANE (Furnace and Stove Oil)

Financial Type	Cost ($)	Cents Per Litre Delivered
Total Operating Cost	2,189,415	4.10
Total Office Support and Other Costs	4,487,675	8.41
Total Costs	6,677,089	12.51
Fuel Litres Delivered per Year		53,377,313

Table 5: 2010 Regulated Heating Fuel Survey Results for Zone 1ANE (Propane)

Financial Type	Cost ($)	Cents Per Litre Delivered
Total Operating Cost	NA	NA
Total Office Support and Other Costs	NA	NA
Total Costs	1,592,684	29.88
Fuel Litres Delivered per Year		5,329,618

Table 6: 2011 Regulated Heating Fuel Survey Results for Zone 1ANE (Propane)

Financial Type	Cost ($)	Cents Per Litre Delivered
Total Operating Cost	NA	NA
Total Office Support and Other Costs	NA	NA
Total Costs	1,600,844	29.60
Fuel Litres Delivered per Year		5,408,286

Data analysis within the total base zone showed the following themes:

Heating Fuel (Furnace and Stove Oil)

- Overall costs in absolute CPL widely varied amongst the data contributors. In 2010 there was a 133% (2011 – 155%) variance in the overall costs of contributors.
- Scale of delivery also widely varied amongst the data contributors.

- The areas of the business in which costs were incurred also varied significantly amongst data contributors showing there are large differences in business models used to conduct the distribution of regulated heating fuels.

Propane

- Similar to the trend observed in furnace and stove oil, overall costs varied significantly amongst contributors. In 2010 there was a 311% (2011 – 310%) variance in the overall costs of contributors.

- Scale of delivery also varied but not as significantly as furnace and stove oil.

- The areas of the business in which costs were incurred continued to vary amongst industry participants and continued to support the findings of furnace and stove oil showing there are large differences in business models used to conduct the distribution of regulated heating fuels.

While not presented in tables within this report, individual cost accounts within the operating cost and office support and other cost categories also displayed the themes previously described. The main conclusion from the survey data was that a one size fits all absolute value cost in CPL that could be obtained from the survey and used as a model input was not a viable approach. Given the wide variances in costs submitted along with variances in scale and business models, it was not practicable to conclude that a single particular contributor's overall costs were the correct or representative cost of doing business for an entire industry of reputable participants. Nor was it reasonable to selectively choose specific cost line results, concluding that the cost of business for a certain contributor was the correct benchmark that should be applied to all industry participants. Attempts at using average absolute CPL results for the total base zone still produced wide individual contributor variances from the high and low values of the data. The implications of the use of either individual or average absolute CPL data as inputs to a model were that contributors on either end of the range could potentially be unfairly represented in the model. Given the problematic nature of the CPL cost data, Grant Thornton ceased pursuing initial model concepts. Determining the remaining elements of the initial model concept such as asset investment bases and industry returns on investment was not required at this point and likely would have resulted in the same one size fits all issues that the cost data produced.

During the course of the Study preliminary data findings were shared with the Board and the staff of the Board. Discussions during these meetings corroborated Grant Thornton's observations on the data. The Board's staff noted in their previous attempts to perform heating fuel cost surveys it was not possible to conclude on CPL data that represented a dynamic group of industry participants.

With first concepts of a model not practical in terms of application, a new concept of a model needed to be determined. As such, the database was revisited to determine alternative ways of summarizing, analyzing and modelling the industry participant data.

In determining a new model, the cost data would have to be summarized in a way that showed less variance and more consistency and consensus amongst the contributors. Also, the model needed to

produce a result that would be as representative as possible to a dynamic industry of participants which greatly varied in size, business model and scale of fuel delivery.

With these concepts in mind, a new model approach was envisioned which effectively removed absolute value CPL costs and summarized costs as a percentage of total cost to carry out storage and distribution of regulated heating fuels. To create more consistent data trends, this model would also remove the more detailed and varied cost categories of the survey and summarize costs in broader and more general terms. This essentially would produce a set of effort factors that are required to distribute regulated heating fuels. Applying these percentage cost factors, the existing mark-ups, as determined from prior cost studies, would be attributed to current cost drivers and effectively rebalanced and adjusted to reflect changes in current costs. The following table summarizes the fundamental concepts of the percentage cost based model and the rationale of these concepts:

Table 7: Percentage Cost Based Model Concepts and Rationale

Concept	Rationale/Benefit
Costs summarized as a percentage of total costs	Removes the issue of choosing absolute value CPL data among contributors with highly varied CPL costs of storage and delivery of regulated heating fuels.
Costs summarized in total removing the direct operating cost and office support and other distinctions	Eliminates determining or suggesting a correct way of doing business amongst contributors with varied business models. Those businesses that are heavier or lighter in costs in any area (i.e. direct operating costs or office support costs) incur cost efforts more consistently when expressed in total cost percentage terms.
Pre existing mark-ups are effectively rebalanced and reattributed to current costs of delivering regulated heating fuels	Previous studies of 2005 and 2006 determined mark-ups that gained the acceptance and consensus support of industry stakeholders, through complex models. Using industry representative percentage cost factors of today, these mark-ups can be updated to today's cost of delivering regulated heating fuel.

With these model concepts in place, the first step was to reassign the survey data contained in the database to broader financial categories. In this process, the operating costs and office support and other cost descriptions were removed in order to combine the data in a total cost format. Furthermore, the specific detailed cost descriptions were assigned to broader cost categories. Within the database, a new field was added called "Allocation Category" which was used to group the detailed cost lines to higher level categories. To establish a set of higher level cost allocations, Grant Thornton obtained knowledge of prominent cost drivers from discussions with industry participants. In addition, insights from industry associations using similar cost classification techniques, such as the Atlantic Convenience Stores Association, were also considered. Based on these investigations, the allocation categories used consisted of the following descriptors:

- Capital Costs and Depreciation
- Fuel and Vehicle Operating
- Insurance
- Office, Administrative and Other Costs
- Rent
- Repairs and Maintenance
- Transaction Fees
- Utilities and Communications
- Wages and Salaries

Once these higher level cost categories were assigned, the operating versus office and other cost distinctions were removed and a set of percentage cost factors emerged as shown in the following table:

Table 8: 2010 Percentage of Total Cost Allocations for Regulated Heating Fuels

Fuel Category	Percentage Allocation of Total Cost
Heating Fuel (Furnace and Stove Oil)	
Storage and Distribution Costs	
Capital Costs and Depreciation	13%
Fuel and Vehicle Operating	5%
Insurance	2%
Office, Administrative and Other Costs	9%
Rent	5%
Repairs and Maintenance	8%
Transaction Fees	4%
Utilities and Communications	4%
Wages and Salaries	50%
Total Storage and Distribution Costs	100%
Propane	
Storage and Distribution Costs	
Capital Costs and Depreciation	8%
Fuel and Vehicle Operating	9%
Insurance	1%
Office, Administrative and Other Costs	8%
Rent	4%
Repairs and Maintenance	7%
Transaction Fees	4%
Utilities and Communications	4%
Wages and Salaries	55%
Total Storage and Distribution Costs	100%

A much more consistent data set exists when summarizing costs in terms of effort factors as a percentage of total cost, particularly in cases of the larger cost drivers. For instance, in the Heating Fuel (Furnace and Stove Oil) product category, one of the largest cost drivers of each survey participant is wages and salaries. On a percentage of total cost basis for 2010, this effort factor showed only 10% variance of participant data from the low and high contributors. The percentage of total cost based

results show a much higher level of consistency of data than that expressed in absolute CPL terms which contained large variances driven by scale of delivery and location of costs within a participant's business model (i.e. variances within the classification of costs as operational costs or office support and other costs). As previously discussed, choosing a particular participant's scale of delivery or business model or averaging the results on a CPL basis did not produce a representative result for the entire group of industry participants. On the other hand, the percentage of total cost data for furnace and stove oil shows that regardless of scale of operations, business models and locations of costs, approximately 50% of an industry participant's effort is consumed by human capital. Applying this factor and observable price rate of changes to past mark-ups that have received industry stakeholder consensus, should provide a result that is better representative of a dynamic industry, versus selecting individual or average participant CPL results to generate entirely new mark-ups. Observing other percentage cost categories for furnace and stove oil, wider variances exist than in the wages category, however the results remain more consistent in representing the industry than CPL results. While variances among data contributors are still present in the percentage cost based method, it continues to provide a common representation of industry participants that overcomes scale differences and variances in absolute CPL data. The 2011 data results further supported the 2010 observations as illustrated in the following table:

Table 9: 2011 Percentage of Total Cost Allocations for Regulated Heating Fuels

Fuel Category	Percentage Allocation of Total Cost
Heating Fuel (Furnace and Stove Oil)	
Storage and Distribution Costs	
Capital Costs and Depreciation	11%
Fuel and Vehicle Operating	6%
Insurance	3%
Office, Administrative and Other Costs	9%
Rent	5%
Repairs and Maintenance	7%
Transaction Fees	5%
Utilities and Communications	4%
Wages and Salaries	50%
Total Storage and Distribution Costs	100%
Propane	
Storage and Distribution Costs	
Capital Costs and Depreciation	8%
Fuel and Vehicle Operating	10%
Insurance	2%
Office, Administrative and Other Costs	8%
Rent	3%
Repairs and Maintenance	6%
Transaction Fees	5%
Utilities and Communications	3%
Wages and Salaries	56%
Total Storage and Distribution Costs	100%

In summary, percentage cost based inputs proved to be appropriate for a model that reflects the costs of a dynamic industry without the challenges of selectively choosing individual or average participant CPL costs as the representative cost of doing business. Furthermore, the model approach provides a comparable initial benchmark or starting point to analyze and support the reasons for mark-up changes. The following section describes the mechanics and procedures of the percentage cost based model in detail.

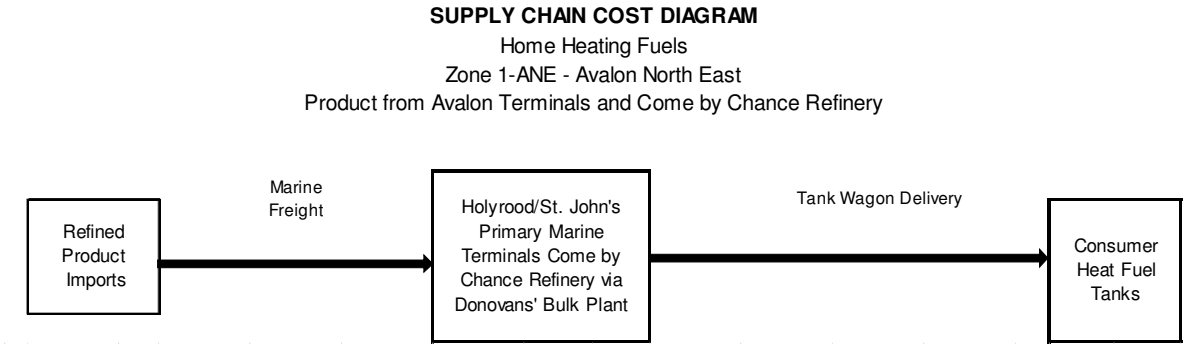
Percentage Cost Based Model Process

The percentage cost based model begins with previously determined mark-ups from storage and distribution studies conducted in 2005. This approach effectively rebalances and rebuilds these mark-ups using percentage factors obtained from the industry surveys of current costs previously described. The following steps describe the modelling process in more detail using furnace oil heating fuel as an illustrative example. Appendix B presents the model results in Zone 1ANE for furnace, stove and propane heating fuels.

Step 1: Determine/Affirm the Supply Chain and Designate Wholesale and Retail Points of the Supply Chain

To begin modelling, initial supply chain knowledge was obtained for Zone 1ANE from the previous storage and distribution study performed in 2005. In that study, the supply chain was described as follows:

Table 10: 2005 Supply Chain for Heating Fuels**



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

In order to validate previously documented supply chains, Section 2 of the survey gathered information on primary source and location of purchase. The results of this portion of the survey indicated that the supply chains documented in 2005 studies remain intact. The following table presents survey participants primary sources of purchase of regulated heating fuels for Zone 1ANE:

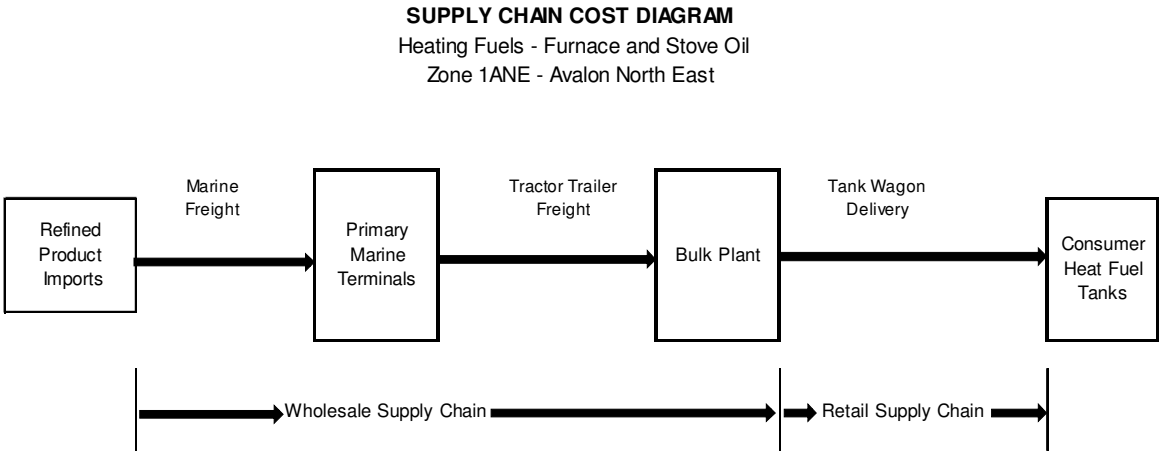
Table 11: Location and Primary Source of Purchase of Furnace and Stove Oil

Survey Participant	Primary Source of Purchase	
	Marine Terminal	**Bulk Storage**
Harvey's Oil Limited	N/A	Donovan's Industrial Park
Irving	St. John's	N/A
North Atlantic	Come by Chance	Donovan's Industrial Park
Ultramar	St. John's	Holyrood

Future model updates should continue to include a survey form that describes supply chains and obtains the latest source of purchase information. This will ensure that the supply chain is being modelled with relevant information on wholesale and retail supply points.

With supply chains now validated, wholesale and retail supply points are assigned to the chain. The following table illustrates the wholesale and retail points of the current supply chain for Zone 1ANE:

Table 12: 2011 Supply Chain with Wholesale and Retail Distribution Points



Wholesale Supply Chain: The wholesale supply chain commences with refined regulated heating fuel transported via marine and tractor trailer freight to marine storage terminals and related bulk plants. These storage facilities mark the end point of the wholesale supply chain.

Retail Supply Chain: The retail supply chain commences with regulated heating fuel picked up at primary marine terminals and related bulk plants. This fuel is then distributed by trucks, also known as

tank wagons, to consumer heating fuel tanks. This point of delivery marks the end of the retail supply chain.

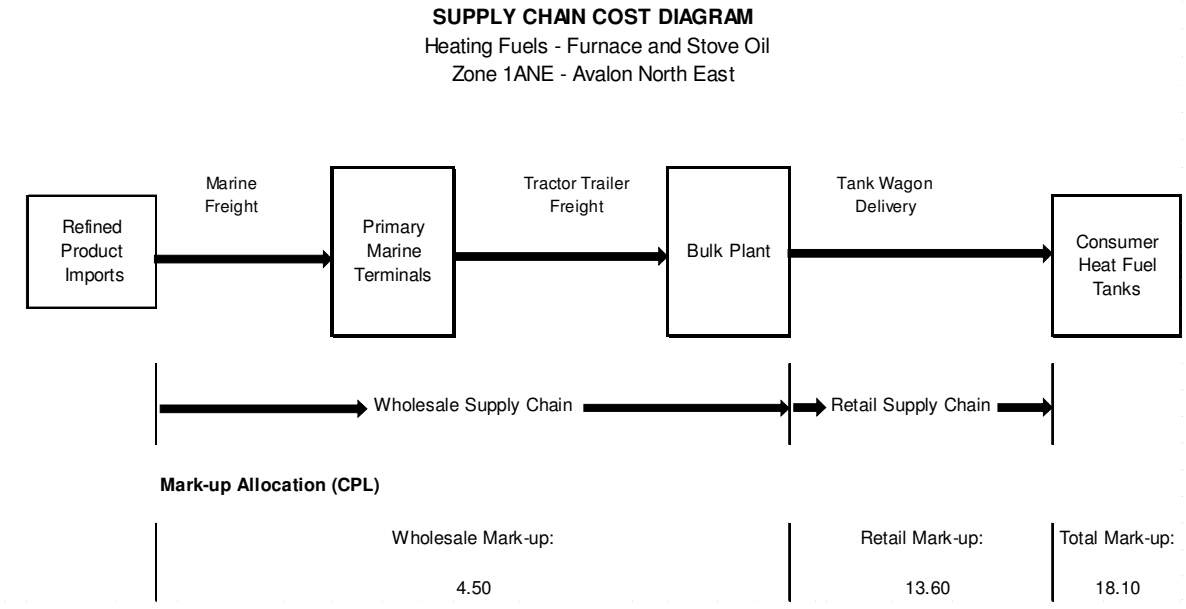
With supply chains now documented, the next step allocates opening mark-ups to the supply chain.

Step 2: Allocate Previously Determined Mark-ups to Wholesale and Retail Points of the Supply Chain

Previous studies concluded with mark-ups that represented the wholesale and retail points of the supply chain. These mark-ups are allocated to the supply chain and serve as the starting point for rebalancing and rebuilding the mark-ups.

Opening mark-up allocations were determined through consultation with the Board and were based on conclusions from the 2005 storage and distribution study. Table 13 presents the opening mark-up allocations for Zone 1ANE:

Table 13: 2005 Supply Chain Mark-up Allocation



Note on Mark-up Allocation for Propane

Conclusions from the 2005 storage and distribution study did not provide an allocation of the total mark-up for propane across retail and wholesale sections of the supply chain. For purposes of this Study an opening mark-up allocation was made to wholesale and retail portions of the propane supply chain based on the average opening wholesale and retail mark-up allocations for furnace and stove oil. The average percentage opening mark-up allocation for furnace and stove oil was 29% for the wholesale portion of the supply chain and 71% for the retail portion of the supply chain. These percentages were applied to the total opening mark-up for propane of 42.70 CPL to calculate a wholesale and retail mark-up of 12.40 CPL and 30.30 CPL respectively.

Step 3: Obtain Model Inputs

With opening mark-ups allocated, the next step requires obtaining model inputs required to complete the percentage cost based model process. To populate the model, two input categories are required: 1) percentage of total cost inputs, and 2) price rate of change inputs. The following commentary discusses these categories in more detail:

1. **Percentage of Total Cost Inputs**

A survey of industry participants is conducted to obtain cost of storage and distribution data. This survey methodology and conversion of data costs into percentage of total costs has been previously discussed in detail.

Wholesale Supply Chain Modelling

Surveys conducted during the Study were not designed to gather detailed cost information at the wholesale portions of the supply chain for regulated heating fuels. These surveys were aligned with the Board's primary objective of creating a truck based model and were based on the tank wagon delivery portion of the chain, which is the retail point of storage and distribution. To model wholesale mark-ups, Grant Thornton conducted an analysis of Nymex versus rack pricing data. The premise of this approach was that two sources of pricing data encompassing the beginning and end points of the wholesale supply chain were available that could be used for modelling purposes. These sources are Nymex pricing (representing the beginning of the wholesale chain) and rack pricing (representing the end of the wholesale supply chain). These price points were understood to encompass the wholesale portion of the supply chain consisting of marine freight, primary marine terminal and related bulk plant operating costs and profit margins. It was anticipated that the percentage change in the Nymex to rack price spreads could be used to rebalance and rebuild the mark-up for the wholesale portion of the supply chain. The benefit of this approach was that such data was readily available through industry research sources and would be an alternative to conducting a survey of industry participants with operations at various points of the wholesale supply chain. A survey methodology similar to the truck based survey could be conducted for the wholesale portions of the supply chain however this would make the survey portion of the modelling process increasingly lengthy with considerably more data to accumulate, validate, analyze and interpret. Hence using the wholesale pricing feeds available to understand the costs of wholesale distribution was a logical step in achieving that goal.

Preliminary Nymex and rack price data was obtained from industry research resources on a weekly basis for the years 2005 to 2011. In addition requests were made to obtain data from survey participants having rack operations. Unfortunately, the data received was challenging to interpret and did not show a consistent price trend. Data obtained from research resources showed significant decline from 2005 to 2011 while a limited sample of data obtained from industry participants was not consistent with the industry research sources. Use of this data was causing wide fluctuations in model scenarios given the variability of the data and lack of consensus between participant and industry research sources of data. Given these challenges Grant Thornton was not able to conclude that these sources of data, when used as model inputs, would produce a wholesale mark-up representative of industry participants. A conclusion was made to maintain the wholesale mark-up at its current levels

and explore further alternatives for modelling the wholesale portion of the supply chain along with recommended mark-up adjustments in Part B of the Study.

2. Price Rate of Change Inputs

Percentage of total cost factors previously described are used to allocate and rebalance opening mark-ups to particular cost categories such as wages and salaries. Once opening mark-ups are allocated, price rate of change inputs are applied to those allocations to determine mark-up increases or decreases.

In order to obtain price rate of change data, feedback from industry participant meetings was used to identify cost categories that experienced significant increases since the last cost study was performed in 2005. A common theme conveyed in meetings with industry participants was that all costs of distribution have steadily increased over the period 2005 to 2011 with some increases being more significant than others. Given the percentage based model methodology was conceived after industry participant surveys had been administered and completed, price rate of change surveys had not been created or conducted to verify these increases. Therefore industry participant data was not initially available to quantify and populate this section of the model. In absence of survey data, a search of external price data sources was performed to determine price rate of change information sources which could preliminarily measure the price changes that industry participants were experiencing. These searches were successful in indentifying external data sources for wages and salaries, fuel and rent, however relevant external sources of price data were not discovered in searches for price information for the remaining cost allocation categories. The following table summarizes the external data sources that were available to examine price rates of change for the period 2005 to 2011:

Table 14: Price Rate of Change External Data Sources

% Cost Category	% of Total Cost	External Data Source	Price Rate of Change 2005-2011
Fuel and Vehicle Operating	**6%**	**Board of Commissioners of Public Utilities**	**30%**
Rent	**5%**	**Cushman & Wakefield**	**49%**
Wages and Salaries	**50%**	**Statistics Canada CANSIM Tables**	**43%**
Remaining Cost Allocation Categories	**39%**	**Bank of Canada Inflation Calculator**	**12%**

These external data sources corroborated industry participant feedback and showed that significant price increases have occurred in the areas of wages and salaries, fuel and rent. Subsequent to obtaining verification of increased prices from the external price data, a focused industry participant survey was then performed for wages and salaries and rent in order to obtain actual industry participant data for price rate of change.

The following commentary discusses the results of the price rate of change investigations in more detail:

(i) Fuel and Vehicle Operating

A common theme conveyed in meetings with industry participants was that all costs of distribution have steadily increased since 2005 with certain costs categories being more prominent in those increases than others. Fuel costs were consistently mentioned as a direct cost of delivery that has seen a large increase since 2005. Examining externally available sources of costs, it was evident that fuel costs had significantly increased since the last cost study. As tank wagons are diesel operated vehicles, the Board of Commissioners of Public Utilities weekly maximum regulated pricing for motor fuels was examined to determine the change in diesel fuel prices since 2005. As of December 20, 2005 diesel was priced at 104.30 CPL. Moving forward to December 29, 2011, the price of diesel was listed at 136.00 CPL which is a 30% increase over the six year period. Focused surveys were not required to be performed in the fuel category as the Board's regulated fuel price data was a source that was deemed representative of the actual price rate of change experienced by industry participants given the regulatory nature of such costs.

(ii) Wages and Salaries

Wages and salaries were additional costs identified in meetings with industry participants as experiencing significant price increases since 2005. It was identified that a significant rise in tradesperson demand has increased wages required to attract and retain tank wagon operators in the industry. A general theme conveyed in this category was that it is difficult to attract a driver for less than $22 dollars per hour. Externally available industry price data supported this increase. Using tables from Statistics Canada's Canadian socioeconomic database (CANSIM), for the category of Trades, Transport and Equipment Operators and Related Occupations within Newfoundland and Labrador, significant wage increases from 2005 were observed. In addition, CANSIM tables were used to assess price changes in office support costs. To examine these changes, CANSIM data was obtained for the category Financial, Secretarial and Administrative Occupations. This category also showed significant wage increases since 2005. The following table presents the increases in wages and salaries obtained from CANSIM sources:

Table 15: CANSIM Newfoundland and Labrador Wages and Salaries Data

Wage Category	December 2005 (Wages per Hour)	December 2011 (Wages per Hour)	Price Rate of Change 2005-2011
Trades, Transport and Equipment Operators and Related Operations	15.46	21.70	40%
Financial, Secretarial and Administrative Occupations	15.38	22.29	45%

With significant price increases corroborated externally, a survey of industry participants was then performed to obtain the actual price rate of change experienced from the period of 2005 to 2011. Average salaries or wages per hour were requested from industry participants as of December 31, 2005

and December 31, 2011 respectively for tank wagon operators and office support personnel. In certain instances, where agents are compensated by commission, commission rates were accepted as a substitute for wages and salaries data. The following tables summarize the average industry participant survey results:

Table 16: Price Rate of Change Summary Tank Wagon Operator (Furnace and Stove Oil)

Price Rate of Change: Wages and Salaries - Tank Wagon Operator	
Contributor Data	% Change 2005 - 2011
Average	36%

Table 17: Price Rate of Change Summary Office Support (Furnace and Stove Oil)

Price Rate of Change: Wages and Salaries - Office Support and Other Costs	
Contributor Data	% Change 2005 - 2011
Average	22%

Table 18: Price Rate of Change Summary Tank Wagon Operator (Propane)

Price Rate of Change: Wages and Salaries - Tank Wagon Operator	
Contributor Data	% Change 2005 - 2011
Average	12%

Table 19: Price Rate of Change Summary Office Support (Propane)

Price Rate of Change: Wages and Salaries - Office Support and Other Costs	
Contributor Data	% Change 2005 - 2011
Average	20%

(iii) Rent

Rent is another category that survey participants identified as experiencing increased prices. External data sources show significant increases in rent over the period 2005 to 2011. Using publically available research reports from Cushman & Wakefield, a global commercial real estate services firm, St. John's has shown a significant increase in commercial rent rates of 49% since 2007. No commentary was available in the report for 2005 and 2006. In absence of any statistics for those years it was logical to conclude that the 2007 to 2011 statistic would represent the minimum amount that prices would have risen, given the general trend of a real estate market in Newfoundland and Labrador that has shown significant increases in price over the past several years. With significant price increases corroborated externally, a survey of industry participants was performed to obtain the actual price rate of change in rent experienced from the period of 2005 to 2011. Annual rent paid and rental rate per square foot per

year were requested for office facilities as of December 31, 2011 and December 31, 2005 respectively. The following tables summarize the industry participant survey results:

Table 20: Price Rate of Change Summary Rent (Furnace and Stove Oil)

Price Rate of Change: Rent	
Contributor Data	% Change 2005 - 2011
Average	20%

Table 21: Price Rate of Change Summary Rent (Propane)

Price Rate of Change: Rent	
Contributor Data	% Change 2005 - 2011
Average	19%

(iv) Remaining Cost Allocation Categories

Although survey participants also raised concerns about increases in other cost categories since 2005, no conclusions were made on price rate of changes in absence of known external sources of price rate of change data or participant survey price data. However, in these cases, it was logical to conclude that these categories of costs would have at least experienced a standard inflationary increase each year. The Bank of Canada (BOC) inflation calculator was used to determine inflationary increases for the period of 2005 to 2011. As described on the BOC's website, the inflation calculator uses monthly consumer price index data to show changes in a fixed basket of consumer purchases. The Bank of Canada's inflation calculator for the time period from 2005 to 2011 shows that inflation was 11.96%. This rate was applied to the remaining cost allocation categories.

Step 4: Populate the Model Template

With the previous steps completed, a set of model inputs now exist to populate a mark-up model template. The following commentary discusses the mechanics of the percentage cost based model, illustrated with carve outs of portions of the model template, followed by a portrait of the complete model template. Numeric data in the following discussion is based in CPL except where described in percent.

To begin populating the model template, opening supply chain mark-ups discussed in Step 2 are entered in the first section of the model template. The following table presents a snapshot of the portion of the model template used to capture opening mark-ups.

Table 22: Populating the Opening Mark-up Allocation

Supply Chain Type			Wholesale	Retail	Total
Zone Number	**Description**	**Fuel Type**	**Refined Product to Rack**	**Tank Wagon Freight**	**Total**
Total 1ANE	Avalon North East	Furnace			
Opening Mark-up Allocation			4.50	13.60	**18.10**

As can be seen in the above table, the yellow cells represent input cells for fuel type, along with mark-ups for the wholesale and retail points of the supply chain. The opening mark-ups were obtained from previous studies performed in 2005. The total cell is a calculation based cell summing the wholesale and retail cells.

The next model inputs to be populated are the truck based percentage of total cost factors and price rate of change percentage factors. In this section the yellow inputs cells, consisting of percentage cost allocations and percentage price rate of changes, are populated and applied to the opening retail mark-up in a consecutive multiplicative manner. This calculation determines an increase or decrease in retail mark-up. The following table illustrates the retail mark-up inputs and adjustment of the retail mark-up in the context of the Opening Mark-up Allocation initially presented in Table 22:

Table 23: Populating the Retail Mark-up Adjustment Inputs

Supply Chain Type			Retail
Zone Number	**Description**	**Fuel Type**	**Tank Wagon Freight**
Total 1ANE	Avalon North East	Furnace	
Opening Mark-up Allocation			13.60
Retail Mark-up Adjustment Inputs:			
Tank Wagon % Inputs:			
Cost Category	% of Total Cost	% Price Rate Change	
Capital Costs and Depreciation	12%	12%	0.19
Fuel and Vehicle Operating	6%	30%	0.23
Insurance	2%	12%	0.04
Office, Administrative and Other Costs	9%	12%	0.15
Rent	5%	20%	0.15
Repairs and Maintenance	7%	12%	0.12
Transaction Fees	4%	12%	0.07
Utilities and Communications	4%	12%	0.06
Wages and Salaries	50%	29%	1.95
2011 Mark-up Adjustment			2.96
2011 Mark-up			16.56

The retail mark-up adjustment for a Cost Category is calculated using the following formula:

Retail mark-up adjustment = Opening Mark-up Allocation x % of Total Cost x % Price Rate of Change

Using wages and salaries as an example, 1.95 CPL results from the following calculation:

1.95 = 13.60 x 50%*** x 29%***

*** Note: percentages in this calculation example are rounded. Given the model uses infinite decimal precision, a 1.95 CPL result is produced in the model.

With each of the wholesale and retail mark-up adjustments now calculated, the remaining portions of the model update automatically summarizing required mark-up adjustments and the new final wholesale, retail and total mark-ups. Table 24 illustrates the entire model:

Table 24: Percentage Cost Based Mark-up Adjustment Model

Supply Chain Type			Wholesale	Retail	Total
Zone Number	**Description**	**Fuel Type**	**Refined Product to Rack**	**Tank Wagon Freight**	**Total**
Total 1ANE	Avalon North East	Furnace			
Opening Mark-up Allocation			4.50	13.60	**18.10**
Retail Mark-up Adjustment Inputs:					
Tank Wagon % Inputs:					
Cost Category	% of Total Cost	% Price Rate Change			
Capital Costs and Depreciation	12%	12%		0.19	
Fuel and Vehicle Operating	6%	30%		0.23	
Insurance	2%	12%		0.04	
Office, Administrative and Other Costs	9%	12%		0.15	
Rent	5%	20%		0.15	
Repairs and Maintenance	7%	12%		0.12	
Transaction Fees	4%	12%		0.07	
Utilities and Communications	4%	12%		0.06	
Wages and Salaries	50%	29%		1.95	
2011 Mark-up Adjustment			-	2.96	**2.96**
2011 Mark-up			4.50	16.56	**21.06**

Conclusions

Completion of Part A of the Study has resulted in the following conclusions:

1. Gathering data in the current survey format was a challenging and lengthy process to complete. Extensive additional analysis and consultation with industry participants had to be conducted to compile surveys within a database. Four main challenges were encountered during the survey process:

   - Timeliness of response and lack of response to the survey;
   - Separating cost data combined across zones and regulated heating fuel categories and deriving CPL figures from survey data submitted;
   - Deciphering and entering ad hoc supplementary cost schedules into the database, for example overhead allocations submitted with survey responses;
   - Allocating commissions to more specific cost categories;

   Cost databases based on the current survey will not be easily compiled and updated going forward without incorporating corrective measures to address these challenges. As the easily updated criteria is a key consideration for the Board in executing a mark-up model, an opportunity exists going forward to make surveys more efficient and in line with this objective.

2. Initial model concepts of building a mark-up based on absolute value CPL data were not practicable. A one size fits all model, selecting either individual results as a proxy for the industry or average results of participants was not viable given the extensive variances in CPL data. The variances were driven by the large differences in participant size, scale of delivery, types of costs incurred and business models used for distribution of regulated heating fuels.

   - Size and business model – participants conduct business models ranging from small home based business to large multi faceted energy operations. Each of these companies has a different cost structure, from minimalist structures to organizations with large geographically diverse locations with more complex administrative and overhead requirements.
   - Scales of distribution – industry participants have widely varied scales of distribution.

Given the diversity of reputable participants, with an extensive history of serving Newfoundland and Labrador's regulated heating fuel requirements, it was not practicable to choose a particular CPL result as the correct way of distributing regulated heating fuel. Doing so could result in a model that is not representative of diverse industry participants. Average CPL results were also not an alternative to solving this problem as wide variances from the high and low data contributors still remained using this approach.

3. Summarizing data in broader categories of cost, expressed as a percentage of total cost, produces a set of average effort factors which show a more consistent representation of the industry than absolute CPL data.

   Using these factors in a percentage cost based model, produces a result that is easily understood, is comparable to previous determined mark-ups and produces mark-ups with more consensus representation of industry stakeholders. The following key concepts of the percentage based model are described in more detail:

   - Comparable to prior mark-ups – the percentage cost based model rebalances and rebuilds previous determined mark-ups that obtained industry stakeholder consensus and acceptance and re-establishes them based on current costs.

   - Easily understood – the model is multiplicative in nature using nine easily understood cost categories.

   - Consensus representation of a diverse industry – average percentage of total cost factors show a more consistent and consensus representation of a diverse industry. While variances will inevitably exist, they are less pronounced than they would be using CPL data. The percentage of total cost factors also avoid concluding how and where costs should be incurred within a business.

   The percentage cost based model currently applies percentage of total cost effort factors and price rate of change factors to generate mark-ups. Given the percentage based model methodology was conceived after industry participant surveys had been administered and completed, price rate of change surveys had not been created or conducted. In order to obtain price rate of change data, focused industry participant surveys were subsequently performed on cost categories identified in meetings with participants as having experienced large increases since the last cost study performed in 2005. External industry data sources were also examined where available to corroborate the significance of the price increases identified by industry participants. Going forward, models can be further advanced to incorporate more extensive price rate of change survey information and cost level effects.

4. The model serves the Board's goals and objectives as defined previously in the purpose of the Study:

    - Defines wholesale, retail and total mark-up – the model has a specific section which builds a wholesale and retail mark-up which sums to a total mark-up. The wholesale mark-up is generated from cost points starting from refined product to rack point of pickup by tank wagons. Retail mark-ups are generated from this truck based point through to distribution into consumer heating fuel tanks.

    - Determines reasonable profit – as the model starts with a mark-up that obtained industry stakeholder consensus it carries forward and rebuilds an initial result that represented a reasonable profit to industry participants. Using current understanding of today's business costs this initial reasonable profit is rebalanced and reattributed to encompass current costs of business.

    - Dynamic – regardless of how the industry changes in terms of scale, size and business model, such dynamics and diversity can be captured in standardized percentage of cost based effort factors. These effort factors should continue to be present as the industry evolves going forward. Input factors can be developed using survey specifics or external industry sources of information in the absence of relevant internal information (e.g. price rate of change data).

    - Easily Updated – future updates can be performed by surveying and summarizing information as percentage of total cost effort factors. Surveys can be further streamlined to make updating them a more simplified and efficient process.

5. Truck based surveys have been successful in providing percentage based inputs useful for modelling mark-ups at the tank wagon retail level of the supply chain. These surveys were not designed to gather detailed cost information at the wholesale portions of the supply chain for regulated heating fuels. Concepts for modelling wholesale mark-ups were based on obtaining Nymex to rack pricing data from industry research sources and industry participants. Data obtained from research resources showed significant decline from 2005 to 2011 while a limited sample of data obtained from industry participants was not consistent with the industry research sources. Use of this data was causing wide fluctuations in model scenarios given the variability of the data and lack of consensus between industry participant and industry research sources of data. Given these challenges Grant Thornton was not able to conclude that these sources of data, used as model inputs, would produce a mark-up representative of industry participants. A conclusion was made to maintain the wholesale mark-up at its current levels and explore further alternatives for modelling the wholesale portion of the supply chain along with recommended mark-up adjustments in Part B of the Study.

6. Based on the percentage cost based model, the following tables illustrate the mark-up adjustments that have been determined for the period December 2005 to December 2011. The net adjustment excludes a 1.0 CPL retail adjustment that was granted by the Board in January 2010. The models that produced the results presented in the following tables are detailed in Appendix B.

Table 25: Mark-up Changes Expressed in CPL for the Period 2005 to 2011 (Furnace Oil)

Mark-up Summary:

	Wholesale	Retail	Total
Opening Mark-up (2005)	4.50	13.60	18.10
Increase (Decrease) for Survey Period (2005 -2011)	-	2.96	2.96
2011 Mark-up	4.50	16.56	21.06

Mark-up Increase (Decrease):

	Wholesale	Retail	Total
Increase (Decrease) for Survey Period (2005 - 2011)	-	2.96	2.96
Less: Interim Adjustments During Survey Period	-	(1.00)	(1.00)
Mark-up Increase (Decrease)	-	1.96	1.96

Table 26: Mark-up Changes Expressed in CPL for the Period 2005 to 2011 (Stove Oil)

Mark-up Summary:

	Wholesale	Retail	Total
Opening Mark-up (2005)	7.50	15.10	22.60
Increase (Decrease) for Survey Period (2005 -2011)	-	3.28	3.28
2011 Mark-up	7.50	18.38	25.88

Mark-up Increase (Decrease):

	Wholesale	Retail	Total
Increase (Decrease) for Survey Period (2005 - 2011)	-	3.28	3.28
Less: Interim Adjustments During Survey Period	-	(1.00)	(1.00)
Mark-up Increase (Decrease)	-	2.28	2.28

Table 27: Mark-up Changes Expressed in CPL for the Period 2005 to 2011 (Propane)

Mark-up Summary:

	Wholesale	Retail	Total
Opening Mark-up (2005)	12.40	30.30	42.70
Increase (Decrease) for Survey Period (2005 -2011)	-	4.90	4.90
2011 Mark-up	12.40	35.20	47.60

Mark-up Increase (Decrease):

	Wholesale	Retail	Total
Increase (Decrease) for Survey Period (2005 - 2011)	-	4.90	4.90
Less: Interim Adjustments During Survey Period	-	-	-
Mark-up Increase (Decrease)	-	4.90	4.90

Appendix A – 2012 Petroleum Pricing Study Request for Information

Table of Contents

05/28/2012

Section 1: Zone(s) Serviced and Type(s) of Heating Fuel Delivery Operation

Identify each Zone serviced by your company in delivering heating fuel to consumers in your fiscal 2010 and 2011 periods (either calendar year end or fiscal year end if different than calender year end).

Please complete a separate form for each Zone for each year

Zone

☐ Zone 1ANE - Avalon Peninsula Northeast

All points south and southwest from Cape St. Francis to the intersection of the Team Gushue Highway and the Southern Shore Highway; and the area bounded by the Trans Canada Highway on the south and by the Avondale Access Road on the west, north to and including Georgetown and all communities therein.

☐ Zone 1ANW - Avalon Peninsula Northwest

All points north of the Trans Canada Highway from the Whitbourne interchange in the west, north to Blaketown and including the entirety of the Bay de Verde Peninsula, south to and including the Roaches Line and all road branches there-off including Old Shop in the west and Brigus in the southeast.

☐ Zone 1AS - Avalon Peninsula South

The remainder of the Avalon Peninsula generally south of the Trans Canada Highway including the Witless Bay Line and Bay Bulls in the east, the Southern Shore, St. Mary's Bay, the Cape Shore Peninsula and then west along the Trans Canada Highway to and including Little Harbour plus the area north of the Trans Canada Highway from Chapel Arm to Chance Cove.

☐ Zone 1a - Bell Island

Bell Island.

Type(s) of Operation

☐ Company Driver(s) on Salary

☐ Commission Agent/Broker-Agent/Broker Owned Cab and Chassis, Company Owned Tank

☐ Commission Agent/Broker-Company Owned Cab and Chassis and Tank

☐ Commission Agent/Broker-Agent/Broker Owned Cab and Chassis and Tank

☐ Reseller Driver(s)

☐ Reseller Sub Agent(s)/Broker(s)

☐ Other Type Operation (Describe)

Please elaborate below or on a separate sheet if more than one type of operation:

05/28/2012

Section 2, Page 1 of 2

Section 2: Primary Source of Purchase - Furnace Oil Heating Fuel

Briefly identify the source(s) from which your company purchases furnace oil heating fuel, along with details on the location and percentage of total purchases.

Please complete separate form for each Zone

- ☐ Zone 1ANE - Avalon Peninsula Northeast
- ☐ Zone 1ANW - Avalon Peninsula Northwest
- ☐ Zone 1AS - Avalon Peninsula South
- ☐ Zone 1a - Bell Island

2010

		Location(s)	Total purchased (kilolitres)	Average cost per kilolitre	Percentage of total purchases (%)
Marine Terminal Base	☐				
Bulk Storage Facility	☐				
Secondary Bulk Stage Facility	☐				
Other(s)	☐				
_____	☐				
_____	☐				
_____	☐				

Please complete separate form for each Zone

- ☐ Zone 1ANE - Avalon Peninsula Northeast
- ☐ Zone 1ANW - Avalon Peninsula Northwest
- ☐ Zone 1AS - Avalon Peninsula South
- ☐ Zone 1a - Bell Island

2011

		Location(s)	Total purchased (kilolitres)	Average cost per kilolitre	Percentage of total purchases (%)
Marine Terminal Base	☐				
Bulk Storage Facility	☐				
Secondary Bulk Stage Facility	☐				
Other(s)	☐				
_____	☐				
_____	☐				
_____	☐				

05/28/2012

Section 2, Page 2 of 2

Section 2: Primary Source of Purchase - Stove Oil Heating Fuel

Briefly identify the source(s) from which your company purchases stove oil heating fuel, along with details on the location and percentage of total purchases.

for each year

☐ Zone 1ANE - Avalon Peninsula Northeast
☐ Zone 1ANW - Avalon Peninsula Northwest
☐ Zone 1AS - Avalon Peninsula South
☐ Zone 1a - Bell Island

2010

		Location(s)	Total purchased (kilolitres)	Average cost per kilolitre	Percentage of total purchases (%)
Marine Terminal Base	☐				
Bulk Storage Facility	☐				
Secondary Bulk Stage Facility	☐				
Other(s)	☐				
_____	☐				
_____	☐				
_____	☐				

Please complete separate form for each Zone

☐ Zone 1ANE - Avalon Peninsula Northeast
☐ Zone 1ANW - Avalon Peninsula Northwest
☐ Zone 1AS - Avalon Peninsula South
☐ Zone 1a - Bell Island

2011

		Location(s)	Total purchased (kilolitres)	Average cost per kilolitre	Percentage of total purchases (%)
Marine Terminal Base	☐				
Bulk Storage Facility	☐				
Secondary Bulk Stage Facility	☐				
Other(s)	☐				
_____	☐				
_____	☐				
_____	☐				

05/28/2012

Section 3: Volume, Delivery and Cost Information by Zone - Furnace Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

1) Total monthly volumes of furnace oil heating fuel purchased, and average cost, per month for the following periods for all customers (Maximum price regulated and non maximum price regulated).

Year	2010	2010
	Total (litres)	Avg Cost ($/litre)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Cost ($/litre)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

2) Volume by types of furnace oil heating fuel purchased by month, allocated as a percentage of total purchases.

Year	2010			
	Number 2 Fuel Oil (%)	Ultra Low Sulfur Diesel (%)	Blended Number 2 Fuel Oil and Jet Oil (%)	Blended Ultra Low Sulfur Diesel with Kerosene (%)
Jan				
Feb				
Mar				
Apr				
May				
Jun				
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				
Totals for Period				

Year	2011			
	Number 2 Fuel Oil (%)	Ultra Low Sulfur Diesel (%)	Blended Number 2 Fuel Oil and Jet Oil (%)	Blended Ultra Low Sulfur Diesel with Kerosene (%)
Jan				
Feb				
Mar				
Apr				
May				
Jun				
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				
Totals for Period				

05/28/2012

Section 3: Volume, Delivery and Cost Information by Zone - Furnace Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

3) Total monthly volumes of furnace oil heating fuel sold for the following periods for all customers (Maximum price regulated and non maximum price regulated).

Year	2010 Total (litres)	2010 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011 Total (litres)	2011 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

4) Furnace oil heating fuel volumes sold by month to households only.

Year	2010 Total (litres)	2010 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011 Total (litres)	2011 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 3: Volume, Delivery and Cost Information by Zone - Furnace Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres . Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

5) Furnace oil heating fuel volumes sold by month to commercial maximum price regulated accounts only.

Year	2010 Total (litres)	2010 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011 Total (litres)	2011 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

6) Furnace oil heating fuel volumes sold by month to non maximum price regulated accounts only (contract sales).

Year	2010 Total (litres)	2010 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011 Total (litres)	2011 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 3: Volume, Delivery and Cost Information by Zone - Furnace Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres . Use a separate sheet for each Zone.

7) Number of households, commercial maximum price regulated customers and non maximum price regulated customers serviced for the year (furnace oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

8) Average furnace oil heating fuel volume delivered per household, commercial maximum price regulated customers and non maximum price regulated customers per drop.

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

9) Number of households, commercial maximum price regulated customers and non maximum price regulated customers serviced on automatic fill (furnace oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

10) Average annual volume of furnace oil heating fuel for household, commercial maximum price regulated and non maximum price regulated accounts on automatic fill.

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

11) Number of households, commercial maximum price regulated and non maximum price regulated accounts on a 'will-call' drop basis (furnace oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

12) Average annual volume for household, commercial maximum price regulated and non maximum price regulated accounts on 'will-call' basis (furnace oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

13) Number of full-time tank wagons used during the heating season.

2010	2011

14) Number of part-time vehicles used during the heating season. (Use fractions if applicable)

2010	2011

05/28/2012

Section 4: Volume, Delivery and Cost Information by Zone - Stove Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

1) Total monthly volumes of stove oil heating fuel purchased, and average cost, per month for the following periods for all customers (Maximum price regulated and non maximum price regulated).

Year	2010	2010
	Total (litres)	Avg Cost ($/kilolitre)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Cost ($/kilolitre)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

2) Volume by types of stove oil heating fuel purchased by month, allocated as a percentage of total purchases.

Year	2010			
	Number 2 Fuel Oil (%)	Ultra Low Sulfur Diesel (%)	Blended Number 2 Fuel Oil and Jet Oil (%)	Blended Ultra Low Sulfur Diesel with Kerosene (%)
Jan				
Feb				
Mar				
Apr				
May				
Jun				
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				
Totals for Period				

Year	2011			
	Number 2 Fuel Oil (%)	Ultra Low Sulfur Diesel (%)	Blended Number 2 Fuel Oil and Jet Oil (%)	Blended Ultra Low Sulfur Diesel with Kerosene (%)
Jan				
Feb				
Mar				
Apr				
May				
Jun				
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				
Totals for Period				

05/28/2012

Section 4: Volume, Delivery and Cost Information by Zone - Stove Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

3) Total monthly volumes of stove oil heating fuel sold for the following periods for all customers (Maximum price regulated and non maximum price regulated).

Year	2010	2010
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

4) Stove oil heating fuel volumes sold by month to households only.

Year	2010	2010
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 4: Volume, Delivery and Cost Information by Zone - Stove Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

5) Stove oil heating fuel volumes sold by month to commercial maximum price regulated accounts only.

Year	2010	2010
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

6) Stove oil heating fuel volumes sold by month to non maximum price regulated accounts only.

Year	2010	2010
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 4: Volume, Delivery and Cost Information by Zone - Stove Oil Heating Fuel

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

7) Number of households, commercial maximum price regulated customers and non maximum price regulated customers serviced for the year (stove oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

8) Average stove oil heating fuel volume delivered per household, commercial maximum price regulated customers and non maximum price regulated customers per drop.

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

9) Number of households, commercial maximum price regulated customers and non maximum price regulated customers serviced on automatic fill (stove oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

10) Average annual volume of stove oil heating fuel for household, commercial maximum price regulated and non maximum price regulated accounts on automatic fill.

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

11) Number of households, commercial maximum price regulated and non maximum price regulated accounts on a 'will-call' drop basis (stove oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

12) Average annual volume for household, commercial maximum price regulated and non maximum price regulated accounts on 'will-call' basis (stove oil heating fuel).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

05/28/2012

Section 5: Volume, Delivery and Cost Information by Zone - Propane

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres. Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

1) Total monthly volumes of propane purchased, and average cost, per month for the following periods for all customers (Maximum price regulated and non maximum price regulated).

Year	2010	2010
	Total (litres)	Avg Cost ($/litre)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
	Total (litres)	Avg Cost ($/litre)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 5: Volume, Delivery and Cost Information by Zone - Propane

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres . Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

1) Total monthly volumes of propane sold for the following periods for all customers (Maximum price regulated and non maximum price regulated).

Year	2010 Total (litres)	2010 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011 Total (litres)	2011 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

2) Propane volumes sold by month to households only.

Year	2010 Total (litres)	2010 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011 Total (litres)	2011 Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 5: Volume, Delivery and Cost Information by Zone - Propane

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres . Use a separate sheet for each Zone.

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

2) Propane volumes by month sold to commercial maximum price regulated accounts only.

Year	2010	2010
Year	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
Year	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

3) Propane volumes sold by month to non maximum price regulated accounts only (contract sales).

Year	2010	2010
Year	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

Year	2011	2011
Year	Total (litres)	Avg Drop Size (liters)
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		
Totals for Period		

05/28/2012

Section 5: Volume, Delivery and Cost Information by Zone - Propane

Please complete the following tables for each Zone as defined in Section 1.
All volumes are to be reported in Litres . Use a separate sheet for each Zone.

4) Number of households, commercial maximum price regulated customers and non maximum price regulated customers serviced for the year (Propane).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

5) Average propane volume delivered per household, commercial maximum price regulated customers and non maximum price regulated customers per drop.

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

6) Number of households, commercial maximum price regulated customers and non maximum price regulated customers serviced on automatic fill (Propane).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

7) Average annual volume of propane for household, commercial maximum price regulated and non maximum price regulated accounts on automatic fill.

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

8) Number of households, commercial maximum price regulated and non maximum price regulated accounts on a 'will-call' drop basis (propane).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

9) Average annual volume for household, commercial maximum price regulated and non maximum price regulated accounts on 'will-call' basis (propane).

Households Accounts		Commercial Maximum Price Regulated Accounts		Non Maximum Price Regulated Accounts	
2010	2011	2010	2011	2010	2011

10) Number of full-time tank wagons used during the heating season.

2010	2011

11) Number of part-time vehicles used during the heating season. (Use fractions if applicable)

2010	2011

05/28/2012

Section 6: Tank Wagon Information by Zone

Please complete the following tables for each Zone as defined in Section 1.

Details - Tank Wagons used for heating fuel deliveries

Zone		
		Zone 1ANE - Avalon Peninsula Northeast
		Zone 1ANW - Avalon Peninsula Northwest
		Zone 1AS - Avalon Peninsula South
		Zone 1a - Bell Island

Tank Wagons use by year, by unit number, tank capacity, temperature compensated meters, percentage use for all deliveries and number of helpers used each heating season.

2010

Unit Number	Date Manufactured	Tank Size Liters	Temperature Compensated Meter Yes/No	Estimated Percentage use for Maximum Price Regulated Accounts (calculated based on percentage of total volume)	Estimated Percentage use for Non Maximum Regulated Accounts (calculated based on percentage of total volume)	Number of Months per year for which Helper hired

2011

Unit Number	Date Manufactured	Tank Size Liters	Temperature Compensated Meter Yes/No	Estimated Percentage use for Maximum Price Regulated Accounts (calculated based on percentage of total volume)	Estimated Percentage use for Non Maximum Regulated Accounts (calculated based on percentage of total volume)	Number of Months per year for which Helper hired

05/28/2012

Section 7: Tank Wagon Capital Costs (Owned or Leased)

Please complete the following tables for each Zone as defined in Section 1.

Costs - Tank Wagons used for heating fuel deliveries

Zone	
	Zone 1ANE - Avalon Peninsula Northeast
	Zone 1ANW - Avalon Peninsula Northwest
	Zone 1AS - Avalon Peninsula South
	Zone 1a - Bell Island

1) Details of the last five (5) **Tank Wagons** purchased by the Company.

Unit Number	Year Purchased or Leased	Single/Tandem Axel	Tank Size (Liters)	Temperature Compensated Meter Yes/No	Total Cost (see item 2 below)	Financed (Yes/No)	Amount Financed/Lease Payment	Finance Rate/Lease Rate	Finance Term (Months)/Lease Term (Months)

2) Please provide break-down of total cost as follows for each Tank Wagon along with supporting invoices and/or agreements.

Unit Number	Truck Chassis Cost	Tank Cost	Delivery Meter and CPU Cost	Hose/Reel Cost	Other Costs (if any)	Total Cost	Description of Other Costs Included in Column H

3) Please provide the average amortization periods for each of the following:

Asset	Amortization Period
Trunk Chassis	
Tank	
Delivery Meter and CPU	
Hose/Reel	
Other (if any)	

If the tank wagon is leased, please identify if wagon (including chassis, tank, delivery meter and CPU, hose/reel, other) is leased over the same period. If not, please specify different lease terms.

05/28/2012

Section 8, Page 1 of 2

Section 8: Tank Wagon Operating Costs - 2010

Please complete the following tables for each Zone as defined in Section 1.

Annual Per Vehicle Operating Expenses ($/Year)

Zone

	Zone 1ANE - Avalon Peninsula Northeast
	Zone 1ANW - Avalon Peninsula Northwest
	Zone 1AS - Avalon Peninsula South
	Zone 1a - Bell Island

Add additional columns if more then 4 units

Year 2010

Cost Item	Description	Unit Number ____	Unit Number ____	Unit Number ____	Unit Number ____	Totals all Units
1)	Driver wages					0.00
2)	Driver wage overhead and benefits (including workers compensation, CPP and EI premiums, plus any company contributions to other benefits).					0.00
3)	Helper wages					0.00
4)	Helper wage overhead and benefits					0.00
5)	Maintenance costs (excluding tires, fuel and other fluids)					0.00
6)	Costs (front tires)					0.00
7)	Costs (back tires)					0.00
8)	Annual front tires replaced (number of tires)					0.00
9)	Annual back tires replaced (number of tires)					0.00
10)	Other fluid costs (transmission, brake, oil, etc.)					0.00
11)	Annual fuel consumed (volume-liters)					0.00
12)	Fuel cost					0.00
13)	Mileage					0.00
14)	Insurance cost, broken out as per below:					0.00
	Automobile					0.00
	General liability					0.00
	Environmental					0.00
	Business Interruption					0.00
	Other (if any)					0.00
15)	License cost					0.00
16)	Vehicle-mounted meters					0.00
17)	Computerized equipment					0.00
18)	Estimated annual cost of maintaining a spare vehicle for heating fuel deliveries where applicable					0.00
19)	Painting costs					0.00
20)	Cost of communication equipment for each truck (i.e. radios and cell phones)					0.00
21)	Costs of uniforms and personal protective equipment (i.e. safety glasses, gloves etc.) for drivers					0.00
22)	Depreciation					0.00
Other Vehicle Costs-Itemize:						
23)						0.00
24)						0.00
25)						0.00
26)						0.00
	Total expenses					**0.00**

05/28/2012

Section 8, Page 2 of 2

Section 8: Tank Wagon Operating Costs - 2011

Please complete the following tables for each Zone as defined in Section 1.

Tank Wagon Operating Expenses ($/Year)

Zone

	Zone 1ANE - Avalon Peninsula Northeast
	Zone 1ANW - Avalon Peninsula Northwest
	Zone 1AS - Avalon Peninsula South
	Zone 1a - Bell Island

Add additional columns if more then 4 units

Year 2011

Cost Item	Description	Unit Number	Unit Number	Unit Number	Unit Number	Totals all Units
1)	Driver wages					0.00
2)	Driver wage overhead and benefits (including workers compensation, CPP and EI premiums, plus any company contributions to other benefits).					0.00
3)	Helper wages					0.00
4)	Helper wage overhead and benefits					0.00
5)	Maintenance costs (excluding tires, fuel and other fluids)					0.00
6)	Costs (front tires)					0.00
7)	Costs (back tires)					0.00
8)	Annual front tires replaced (number of tires)					0.00
9)	Annual back tires replaced (number of tires)					0.00
10)	Other fluid costs (transmission, brake, oil, etc.)					0.00
11)	Annual fuel consumed (volume-liters)					0.00
12)	Fuel cost					0.00
13)	Mileage					0.00
14)	Insurance cost, broken out as per below:					0.00
	Automobile					0.00
	General liability					0.00
	Environmental					0.00
	Business Interruption					0.00
	Other (if any)					0.00
15)	License cost					0.00
16)	Vehicle-mounted meters					0.00
17)	Computerized equipment					0.00
18)	Estimated annual cost of maintaining a spare vehicle for heating fuel deliveries where applicable					0.00
19)	Painting costs					0.00
20)	Cost of communication equipment for each truck (i.e. radios and cell phones)					0.00
21)	Costs of uniforms and personal protective equipment (i.e. safety glasses, gloves etc.) for drivers					0.00
22)	Depreciation					0.00
Other Vehicle Costs-Itemize:						
23)						0.00
24)						0.00
25)						0.00
26)						0.00
	Total expenses					**0.00**

05/28/2012

Section 9: Annual Office Support and Other Costs for Heating Fuel Delivery Operations - 2010

Please complete the following tables for each Zone as defined in Section 1.

Zone

	Zone 1ANE - Avalon Peninsula Northeast
	Zone 1ANW - Avalon Peninsula Northwest
	Zone 1AS - Avalon Peninsula South
	Zone 1a - Bell Island

Shaded areas can be left blank

		2010	
Cost Item	Description	**Total**	**% Allocated to Maximum Price Regulated Heating Fuel Sales**
1)	Number of permanent office staff employed		
2)	Number of extra office staff employed during the heating season		
3)	Number of heating fuel customers paying by credit card		
4)	Credit card usage fees incurred during the year		
5)	Percentage of office staff time dedicated to heating fuel sales and deliveries		
6)	Amount of office staff costs allocated to heating fuel sales and deliveries		
7)	Average number of heating fuel accounts per dedicated office staff person		
8)	Percentage of managers' / supervisors' time taken by fheating fuel accounts versus other type of accounts or activities		
9)	Amount of mangers/supervisors costs allocated to heating fuel sales and deliveries		
10)	Workers compensation premium rates for all office staff		
11)	Workers compensation dollar amounts for all office staff		
12)	Rent or office space cost		
13)	Office expenses for furniture, computers, printers, copiers, fax machines		
14)	Office expenses including heat, light, machine maintenance		
15)	Other office expenses and consumables including paper, delivery tickets, etc.		
16)	Other administrative costs (i.e.: employee training, head office allocations, etc.)		
17)	Interest and bank service costs		
18)	Administration costs incurred to comply with the Heating Oil Storage Tank Systems regulations		
19)	Costs incurred for environmental protection measures and expenses incurred particularly because of regulatory decree. (excluding insurance and Including costs of disposing of waste oil, spill protection kits, etc.)		
20)	Estimated inventory carrying costs where applicable (provide details- Use separate sheet)		
21)	Other Costs (Identify)		
	Estimated Totals for Year		

05/28/2012

Section 9: Annual Office Support and Other Costs for Heating Fuel Delivery Operations - 2011

Please complete the following tables for each Zone as defined in Section 1.

Zone

	Zone 1ANE - Avalon Peninsula Northeast
	Zone 1ANW - Avalon Peninsula Northwest
	Zone 1AS - Avalon Peninsula South
	Zone 1a - Bell Island

Shaded areas can be left blank

		2011	
Cost Item	Description	**Total**	**% Allocated to Maximum Price Regulated Heating Fuel Sales**
1)	Number of permanent office staff employed		
2)	Number of extra office staff employed during the heating season		
3)	Number of heating fuel customers paying by credit card		
4)	Credit card usage fees incurred during the year		
5)	Percentage of office staff time dedicated to heating fuel sales and deliveries		
6)	Amount of office staff costs allocated to heating fuel sales and deliveries		
7)	Average number of heating fuel accounts per dedicated office staff person		
8)	Percentage of managers' / supervisors' time taken by heating fuel accounts versus other type of accounts or activities		
9)	Amount of mangers/supervisors costs allocated to heating fuel sales and deliveries		
10)	Workers compensation premium rates for all office staff		
11)	Workers compensation dollar amounts for all office staff		
12)	Rent or office space cost		
13)	Office expenses for furniture, computers, printers, copiers, fax machines		
14)	Office expenses including heat, light, machine maintenance		
15)	Other office expenses and consumables including paper, delivery tickets, etc.		
16)	Other administrative costs (i.e.: employee training, head office allocations, etc.)		
17)	Interest and bank service costs		
18)	Administration costs incurred to comply with the Heating Oil Storage Tank Systems regulations		
19)	Costs incurred for environmental protection measures and expenses incurred particularly because of regulatory decree. (excluding insurance and Including costs of disposing of waste oil, spill protection kits, etc.)		
20)	Estimated inventory carrying costs where applicable (provide details- Use separate sheet)		
21)	Other Costs (Identify)		
	Estimated Totals for Year		

05/28/2012

Section 10: Other Information Relating to Heating Fuel Delivery Operations

Zone

	Zone 1ANE - Avalon Peninsula Northeast
	Zone 1ANW - Avalon Peninsula Northwest
	Zone 1AS - Avalon Peninsula South
	Zone 1a - Bell Island

	Query	Comments
Vehicle Allocation		
1)	Please provide an explanation of how the tank wagon's "percentage used for maximum price regulated and non maximum price regulated" [requested in Section 7] was derived with supporting documentation if available.	
Office Staff Allocation		
2)	Please provide a description of how the percentage allocation of work to heating fuel operations [requested in Section 10, cost item number 5] was determined, with supporting documentation.	
3)	Please provide a listing of staff/managers/supervisors and a description of duties for each office staff/manager/supervisor listed as assigned to heating fuel operations [requested in Section 10, cost items number 5 and number 7].	
Tank Wagon		
4)	Please provide a listing of the duties performed by the tank wagon helper, and the average weekly hours and hourly wages paid for each.	
5)	Please provide a description of item(s) included in the computerized equipment cost per vehicle [requested in Section 9, cost item 17].	
	Please provide the n umber of spare vehicles maintained for heating fuel deliveries [requested in Section 9, cost item number 18].	
Wages		
6)	For driver wages, please provide the following:	
	i. the hourly rate paid to drivers	
	ii. Average weekly hours worked during heating season	
	iii. Average weekly hours worked during non heating season	
Agents/Brokers		
7)	Please provide commission rate(s) paid to drivers (if any), with supporting documentation.	
8)	Please provide a breakdown of the commission rate(s) paid to your agent(s)/broker(s), and which operational cost factors are covered by your company and what is covered by the agent(s)/broker(s).	
9)	Please provide a copy of agent/broker agreements and supporting schedules to determine the agents/brokers rate(s) or fees.	
10)	Please provide a listing and amount(s) of any other direct payments paid to the agent(s)/broker(s) to cover any additional costs they incur.	
11)	Please provide a listing and amount(s) of any payments received from your agent(s)/broker(s) by your company for costs paid on their behalf (ex. insurance, financing costs).	
Other Applicable Costs		
12)	Please provide a listing and detail of any other costs incurred relating to the delivery of heating fuel which have not been outlined in our request.	
Other Information		
13)	Pplease provide the average approximate distance product is transported from the primary source of purchase [as outlined in Section 2] to the general area of their delivery territory as well as the average number of trips made per month reported on the basis of heating season and non heating season.	
14)	Please provide a listing and detail of any other major capital or operating expenditures not incurred within the reporting periods requested.	
15)	Please provide any other information you feel is relevant for consideration in relation to the petroleum pricing study.	

05/28/2012

Appendix B – Percentage Cost Based Model Results

1. Furnace Oil

Supply Chain Type			Wholesale	Retail	Total
Zone Number	**Description**	**Fuel Type**	**Refined Product to Rack**	**Tank Wagon Freight**	**Total**
Total 1ANE	Avalon North East	Furnace			
Opening Mark-up Allocation			4.50	13.60	**18.10**
Retail Mark-up Adjustment Inputs:					
Tank Wagon % Inputs:					
Cost Category	% of Total Cost	% Price Rate Change			
Capital Costs and Depreciation	12%	12%		0.19	
Fuel and Vehicle Operating	6%	30%		0.23	
Insurance	2%	12%		0.04	
Office, Administrative and Other Costs	9%	12%		0.15	
Rent	5%	20%		0.15	
Repairs and Maintenance	7%	12%		0.12	
Transaction Fees	4%	12%		0.07	
Utilities and Communications	4%	12%		0.06	
Wages and Salaries	50%	29%		1.95	
2011 Mark-up Adjustment			-	2.96	**2.96**
2011 Mark-up			4.50	16.56	**21.06**

2. Stove Oil

Supply Chain Type			Wholesale	Retail	Total
Zone Number	**Description**	**Fuel Type**	**Refined Product to Rack**	**Tank Wagon Freight**	**Total**
Total 1ANE	Avalon North East	Stove			
Opening Mark-up Allocation			7.5	15.10	**22.60**
Retail Mark-up Adjustment Inputs:					
Tank Wagon % Inputs:					
Cost Category	% of Total Cost	% Price Rate Change			
Capital Costs and Depreciation	12%	12%		0.22	
Fuel and Vehicle Operating	6%	30%		0.25	
Insurance	2%	12%		0.04	
Office, Administrative and Other Costs	9%	12%		0.16	
Rent	5%	20%		0.16	
Repairs and Maintenance	7%	12%		0.14	
Transaction Fees	4%	12%		0.08	
Utilities and Communications	4%	12%		0.07	
Wages and Salaries	50%	29%		2.16	
2011 Mark-up Adjustment			-	3.28	**3.28**
2011 Mark-up			7.50	18.38	**25.88**

3. Propane

Supply Chain Type			Wholesale	Retail	Total
Zone Number	**Description**	**Fuel Type**	**Refined Product to Rack**	**Tank Wagon Freight**	**Total**
Total 1ANE	Avalon North East	Propane			
Opening Mark-up Allocation			12.40	30.30	**42.70**
Retail Mark-up Adjustment Inputs:					
Tank Wagon % Inputs:					
Cost Category	% of Total Cost	% Price Rate Change			
Capital Costs and Depreciation	8%	12%		0.28	
Fuel and Vehicle Operating	9%	30%		0.85	
Insurance	1%	12%		0.05	
Office, Administrative and Other Costs	8%	12%		0.29	
Rent	4%	19%		0.22	
Repairs and Maintenance	6%	12%		0.23	
Transaction Fees	5%	12%		0.16	
Utilities and Communications	4%	12%		0.13	
Wages and Salaries	55%	16%		2.69	
2011 Mark-up Adjustment			-	4.90	**4.90**
2011 Mark-up			12.40	35.20	**47.60**

www.GrantThornton.ca

Audit • Tax • Advisory