

## **9.0 Study Conclusions and Recommendations**

### **9.1 Zone Boundaries**

All zone and sub-zone boundaries were examined in detail during the study process. Using all information, provided and uncovered, the following conclusions were reached with recommendations in each case:

#### **A. Zone Boundaries for Automotive Fuels**

No changes in existing boundaries for automotive fuels are recommended. Except for the zone and sub-zone designation change from Sub-Zone 10a to become Zone 11, 11a and 11b in southern Labrador, it is recommended that all existing zones for automotive fuels retain their existing boundaries and designations.

#### **B. Zone Boundaries for Distillate Home Heating Fuels**

There are two changes recommended for zone boundaries for distillate home heating fuels. As described in Section 6 of this Report, three zones have been proposed for the existing Zone 1 – Avalon Peninsula, with boundaries as described and shown on the map portions in Appendix I. A second change in boundaries is recommended for the west coast of the Island part of the province where the town of Burgeo has been separated within the existing Zone 7 to become Zone 7-SE (South East). It is proposed that the balance of the existing Zone 7 be designated Zone 7-W (West)

These changes in heating zone boundaries come primarily as a result of cost differences in operating bulk plants in the identified areas as indicated in Table 4.

As is the case with automotive fuels, the same changes in designations for Zones 10a and 11 are being recommended for distillate heating fuels.

#### **C. Zone Boundaries for Propane Home Heating Fuel**

A survey of the areas where propane is available for delivery via tank wagon trucks to households for heating purposes resulted in no recommendations for additions or deletions to the zones or zone boundaries currently designated for propane. It is recommended that the ten zones / sub-zones wherein propane is available should therefore remain the same as they now exist and as they are described for automotive fuels.

## 9.2 Zone Pricing Differentials

### A. Pricing Differentials for Automotive Fuel Zones

The first column of figures in Table 13 on the following page gives the total estimated cost to provide automotive fuels to the wholesale point of sale for each zone and sub-zone throughout the province as was derived in Table 8. Table 13 next shows the indicated differential for each zone from that of the Avalon – (Base Zone). The Table then compares the existing cost differentials for each zone with those that are indicated and recommended through the cost analyses as calculated in this Study. The final column shows the change in the recommended pricing differential for each zone/ sub-zone.

The following points should be noted for Table 13:

- a. The laid-in cost for diesel fuel in Zone 7b differs from that for gasoline in Zone 7b. This is because of the differing methods of supply for each product used to fill drums at dockside in Burgeo. The supply chain diagrams, Figures 7b1 and 7b2 in Appendix F, clearly show the differences in methods and costs.
- b. In all areas of Labrador a diesel fuel product that can be stored and used in very cold temperatures is supplied year round. In the Table, this product is termed 'Arctic Diesel' to differentiate it from the 'heavier' diesel used throughout the Island part of the province. Due to product storage limitations and in order to prevent mixing problems during the colder months, no attempt is made to segregate the two grades of diesel in Labrador on a seasonal basis.
- c. When the PPPC first instituted price regulation in the fall of 2001, the difference in the 'refinery rack' prices between furnace and stove oil in eastern Canada was 1.8 cpl. This differential was added to the base price of diesel fuel in all areas of Labrador before the normal distribution cost differential from the base zone was applied. (The 'refinery rack' prices are posted prices by each refiner at a number of major centres, and represent the nominal wholesale prices charged to 'resellers' who buy large amounts of product at suppliers' truck loading racks. One recognized source for these rack prices is the Bloomberg Oil Buyer's Guide, which posts them on a weekly basis) The indicated differentials in the second column of figures in Table 13 do not include this built-in 1.8 cpl premium for diesel fuel in Labrador. The premium would be applied to the base price before the differentials are added to be consistent with the current practice of the PPPC in setting maximum prices. This practice was adopted by the PPPC in order that the location differentials for both gasolines and diesel fuels are the same in each zone.

Although not specifically intended to be addressed in this Study, it should be noted that the differential between furnace and stove oil or between 'light' and 'heavy' distillate has now increased to approximately 3.0 cpl as noted by current postings in the OBG. Should this current differential be applied to diesel fuel in Labrador, the resultant ex-tax prices would increase by 1.2 cpl accordingly.

- d. As previously mentioned in this report, because stock losses incurred at the smaller marine depots in Labrador are notably higher for gasoline than for diesel fuel, laid-in costs for these products are shown separately in the affected zones.

## Storage and Distribution Study

Table 13

		<b>Recommended Adjustments to Zone Differentials for Automotive Fuels (Wholesale Prices)</b>					
<b>Zone</b>	<b>Sub</b>	<b>Zone Description and Supply Method</b>	<b>Total Laid-in Cost to Wholesale Point of Sale (Table 8)</b>	<b>Indicated Total Differential From Base Zone (Ex-Tax)</b>	<b>Existing Differential From Base Zone (Ex-Tax)</b>	<b>Recommended Differential from Base Zone (Ex-Tax)</b>	<b>Indicated Change in Wholesale Differential for Zone</b>
			<b>CPL</b>	<b>CPL</b>	<b>CPL</b>	<b>CPL</b>	<b>CPL</b>
1		Avalon (Base Zone) T/T from Terminals	2.34	0.00	0.0	0.0	0.0
1	a	Bell Island - T/T from Avalon Terminals	3.08	0.74	0.5	0.7	0.2
2		Burin-Bonavista Pens - T/T from Avalon Terminals	3.77	1.43	1.0	1.4	0.4
3		Central Newfoundland - T/T from Avalon Terminals	4.28	1.94	1.5	1.9	0.4
3	a	St. Brendan's - T/T from Avalon Peninsula via Gander Bulk Plant and Tank Wagon	8.11	5.77	5.0	5.8	0.8
3	b	Fogo Island from Avalon Peninsula via T/T / Ferry / Bulk Plant and Tank Wagon	8.70	6.36	2.5	6.4	3.9
3	c	Change Islands - from Fogo Bulk Plant via T/W and Ferry	12.74	10.40	4.5	10.4	5.9
4		Connaigre Peninsula - T/T from Avalon via Bulk Plant via T/W	7.06	4.72	3.0	4.7	1.7
4	a	Gaultois-McCallum-Rencontre East via Bulk Plant - T/W and Drums - <b>Gasoline</b>	10.19	7.85	6.6	7.9	1.2
4	a	Gaultois-McCallum-Rencontre East via Bulk Plant -T/W and Drums - <b>Diesel</b>	10.19	7.85	9.0	7.9	-1.1
5		Springdale Areas from Corner Brook via Springdale Bulk Plant and Tank-Wagon	5.61	3.27	2.0	3.3	1.3
5	a	Long Island via T/W from Springdale Bulk Plant	9.25	6.91	4.0	6.9	2.9
5	b	Little Bay Islands via T/W from Springdale Bulk Plant	9.60	7.26	4.5	7.3	2.8
6		Corner Brook Area - T/T from Marine Terminals	2.97	0.63	0.0	0.6	0.6
7		Stephenville - Port aux Basque - Burgeo - T/T from Corner Brook Terminals	3.66	1.32	2.0	1.3	-0.7
7	a	Ramea - T/T from Corner Brook Terminal and Ferry from Burgeo	6.46	4.12	6.0	4.1	-1.9
7	b	Grey River/Francois -/Grand Bruit/La Poile - via Burgeo Retail Outlet and Drums via Freight Ferry - <b>Gasoline</b>	14.01	11.67	6.6	11.7	5.1
7	b	Grey River/Francois -/Grand Bruit/La Poile - via Burgeo Retail Outlet and Drums via Freight Ferry - <b>Diesel</b>	11.08	8.74	9.0	8.7	-0.3
8		Northern Peninsula South - T/T from Corner Brook Terminals	3.80	1.46	1.5	1.5	0.0
9		Northern Peninsula North - T/T from Corner Brook Terminals	5.34	3.00	3.0	3.0	0.0
10		Labrador-The Straits- T/W Via Marine Terminal and Marine Depot - <b>Gasoline</b>	9.05	6.71	7.5	6.7	-0.8
10		Labrador-The Straits- T/W Via Marine Terminal and Marine Depot - <b>Arctic Diesel</b>	7.75	5.41	7.5	5.4	-2.1
11		Lodge Bay-Cartwright- T/W Via Bulk Plant and Marine Depot (Cost Averaged) - <b>Gasoline</b>	16.90	14.56	12.5	14.6	2.1
11		Lodge Bay-Cartwright- T/W Via Bulk Plant and Marine Depot (Cost Averaged) - <b>Arctic Diesel</b>	15.68	13.34	12.5	13.3	0.8
11	a	Labrador Coast - South - Isolated Communities via Marine Tanker and Depots - <b>Gasoline</b>	22.23	19.89	19.6	19.9	0.3
11	a	Labrador Coast - South - Isolated Communities via Marine Tanker and Depots - <b>Arctic Diesel</b>	20.73	18.39	18.0	18.4	0.4
11	b	Labrador Coast- South - Drums via Freight Ferry - <b>Gasoline</b>	28.27	25.93	N/A	25.9	N/A
11	b	Labrador Coast- South - Drums v ia Freight Ferry - <b>Arctic Diesel</b>	28.57	26.23	N/A	26.2	N/A
12		Central Labrador (Goose Bay Area) - T/W from Marine Terminals - <b>Gasoline</b>	5.49	3.15	4.5	3.2	-1.3
12		Central Labrador (Goose Bay Area) - T/W from Marine Terminals - <b>Arctic Diesel</b>	5.36	3.02	4.5	3.0	-1.5
13		Western Labrador (Labrador City - T/W from Rail Car Bulk Plant - <b>Gasoline &amp; Arctic Diesel</b>	7.13	4.79	4.0	4.8	0.8
13	a	Churchill Falls - T/W from Labrador City Rail Car Bulk Plant - <b>Gasoline &amp; Arctic Diesel</b>	9.22	6.88	6.0	6.9	0.9
14		Labrador Coast - North - Isolated Communities via Marine Tankers and Depots - <b>Gasoline</b>	22.23	19.89	19.6	19.9	0.3
14		Labrador Coast - North - Isolated Communities via Marine Tankers and Depots - <b>Arctic Diesel</b>	20.73	18.39	18.0	18.4	0.4

Note: The laid-in cost for drums at dockside is used as the wholesale price to retailers at the destination community.

### **Automotive Fuels - Notes on recommended price changes greater than 1.0 cpl:**

Zone 3b – Fogo Island: - Whereas some of the gasoline delivered to retail outlets on Fogo Island may come via tank wagon from the primary marine terminal in Lewisporte, the main source for automotive fuels for the Island is via tractor-trailer from the Avalon terminals and then redelivery from Fogo bulk plants via tank wagon. The increased pricing differential of 3.9 cpl accommodates this reality.

Zone 3c – Change Islands: - It was determined through field visitations that the gasoline for Change Islands is redelivered from the bulk plant on Fogo Island via tank wagon and ferry. The recommended price differential recognizes the costs involved with this supply chain. (See Figure 3c, Appendix F)

Zone 4 – Connaigre Peninsula: - A significant volume of automotive fuels supplied to retail outlets on this peninsula comes from the bulk plant at the Pool's Cove crossroads. This plant is supplied via tractor trailer from the Avalon Peninsula. The fuel is then redelivered via tank wagon from the bulk plant to small retail outlets in the area. The recommended differential takes into account all costs elements for this process. (See Figure 4, Appendix F)

Zone 4a – Drums to remote communities from the Connaigre Peninsula: - The effective wholesale differential for regular gasoline between these remote locations and the base zone is currently 6.61 cpl. A wholesale differential of 7.85 from Zone 1 is calculated as being required prior to the retail margin of 10.0 cpl being applied to gasoline. (See Figure 4a, Appendix F for supply chain details) In the case of diesel fuel, however, the effective wholesale differential is currently 9.0 cpl and therefore a reduction of 1.1 cpl is proposed.

Zone 5 – Springdale /Triton/ Baie Verte Peninsula: - The rationale for the 1.3 cpl increase in differential in this zone is due to the fact that much of the automotive fuel volume now goes through the bulk plant in Springdale for redelivery to the retail outlets in the area by tank wagon.

Zone 5a – Long Island and Zone 5b: Little Bay Islands: - Both these sub-zones are supplied from the bulk plant at Springdale. The detailed calculations for the supply chain cost elements, in particular the ferry crossings to these Islands, are shown in Figures 5a and 5b, Appendix F and justify the increased differentials recommended.

Zone 7a – Ramea: - From field visits, the Consulting team learned that the single retail outlet in Ramea is supplied via a light loaded tractor trailer via ferry from Burgeo. This method assumes that part of the full tractor-trailer load can be dropped at an outlet in Burgeo prior to the ferry crossing. The detailed calculation for the tractor-trailer haulage cost is shown Table D-4 Appendix D, while the costs resulting in a reduced differential is depicted by Figure 7a, Appendix F.

Zone 7b – Drums to remote communities from Burgeo: - The recommended differentials for gasoline and diesel differ significantly due to the different methods used in enabling product supply to fill the drums at dockside. The supply chain cost diagrams for both gasoline and diesel is depicted in Figures 7b1 and 7b2 of Appendix F. The gasoline wholesale differential increases by 5.1 cpl while there is a slight decrease in the recommended diesel fuel differential.

Zone 10 – Labrador Straits: - By averaging of the marine freight and the operation costs of the marine depots in this area, the total cost of product delivered to retail outlets is calculated at 2.1 cpl less than the existing differentials for both gasoline and diesel fuel. However, the use of a dedicated vehicle for gasoline deliveries is the reason the cost for gasoline is reduced by only 0.8 cpl.

Zone 11 – Lodge Bay to Cartwright: - The increase in differential of 2.1 cpl for gasoline is primarily due to the required use of a dedicated tank wagon vehicle to deliver gasoline to the small volume retail outlets throughout the area.

Zone 12 – Central Labrador – The decrease in the recommended gasoline and diesel differentials in this zone is primarily due to a reduction in marine freight as determined in this Study.

## **B. Pricing Differentials for Distillate Home Heating Fuels Zones**

Table 14 on the following page recaps the total estimated cost for the delivery of distillate home heating fuels to households in each of the recommended zones and sub-zones for the province. The cost of delivering furnace oil to customers in Zone 1 – Avalon North East, (the Base Zone) from marine tanker freight through to tank-wagon delivery to households is calculated to be an average of 5.12 cents per litre. This number, and all delivered costs for each Zone shown in the first column of figures in Table 14 are taken from the last column of Table 11, previously presented.

The next column of figures in Table 14 gives the indicated price differentials from the base zone as calculated through the processes used in this Study. The third column of figures shows the price differentials between each zone and the base zone as they currently exist in the PPPC maximum allowable price tables.

The fourth column of figures gives the rounded price zone differentials that this cost Study indicates should be applied in each case. These are the revised differentials recommended by the Consulting Team based on the cost differences of providing product in each zone. The final column in Table 14 indicates the resultant changes from the existing differentials for each zone and sub-zone. With but two exceptions, the recommended zone price differential changes are higher than they have been.

The costs calculated for home heating fuels (furnace and stove oil), are those at the retail level, i.e. to the consumer's storage tank, as opposed to the numbers for gasoline, which are the laid-in wholesale costs to the retailer before the retail margin is added.

The high differential cited for Zone 11b is that for a new zone that does not now exist, and where drum deliveries, as suggested, may never be implemented. The cost figures indicate that if the drum deliveries were put in place for these communities, this would be the differential necessary to cover the costs incurred in providing the service.

The supply of home heating fuels to households is a very detailed, time consuming, and demanding business. It has become even more so with each passing year with out migration from rural parts of the province, and the installation of electric heat in almost every new home that is being built or replaced. Volumes of oil consumed per household have also decreased with supplemental heat provided by wood stoves. This is not a new phenomenon in the province, but as household incomes in many cases remain static at best, any increases in the costs of heating fuels will also tend to further cut back consumption.

The costs calculated for home heat deliveries are therefore bare minimums and do not provide for inflation, contribution to overhead, nor return on investment for the supply chain participants in the business. All these elements are supposedly covered in the base fuel price. There is general concern that, given all the downsides of the home heat business, notwithstanding the increased differentials recommended by this report, unless other measures are taken, specifically an increase in the maximum base price, many home heating businesses in the province may well cease to exist over the next few years. Specifically, a detailed analysis of the margins that resellers have between their rack pick-up price, and the maximum allowable retail price to consumers, should be undertaken to evaluate and quantify all costs and the economic viability of their operations.

## Storage and Distribution

### Table 14

#### Recommended Adjustments to Home Heating Fuels - Zone Definitions and Zone Differentials to Retail Points of Sale

<u>Home Heating Fuels</u> <u>(Distillates)</u>				Average Delivered Cost to Households for Area (Retail Point of Sale)	Indicated Total Differential from Retail Price Base Zone	Existing Differential from Base Zone Retail Price Fuel	Recommended Differential from Avalon North East Base Zone	Recommended Change In Differential for Zone
Zone	Sub	Supply Point and Methods		CPL	CPL	CPL	CPL	CPL
1	ANE	<b>Avalon North East (Base Zone)</b>		(Weighted Average)				
		Ex Marine Terminals	From Come by Chance	5.12	N/A	0.00		
1	ANW	Avalon North West		8.02	2.91	0.0	2.9	2.9
1	AS	Avalon South		9.26	4.15	0.0	4.1	4.1
1	a	<i>Bell Island</i>		9.45	4.33	2.0	4.3	2.3
2		Burin and Bonavista Peninsulas		9.21	4.09	2.0	4.1	2.1
3		Central Newfoundland from Avalon Peninsula		8.86	3.74	2.5	3.7	1.2
3	a	St. Brendan's from Avalon Peninsula (Existing)		12.23	7.11	6.0	7.1	1.1
3	b	Fogo Island from Avalon Peninsula (Existing)		11.64	6.52	3.5	6.5	3.0
3	c	Change Islands - from Fogo BP via TW (Existing)		14.42	9.30	5.5	9.3	3.8
4		Connaigre Peninsula from Avalon (Existing)		11.79	6.67	4.0	6.7	2.7
4	a	Gaultois-McCallum-Rencontre East (Drums)		21.67	16.55	9.0	16.6	7.6
5		Springdale-Baie Verte from Springdale BP		9.43	4.31	3.0	4.3	1.3
5	a	Long Island via T/W Ex Springdale Bulk Plant		10.15	5.03	4.5	5.0	0.5
5	b	Little Bay Islands via T/W ex Springdale BP		10.59	5.47	5.0	5.5	0.5
6		Corner Brook Area		6.03	0.91	0.0	0.9	0.9
7	W	Stephenville and Port aux Basques		9.18	4.06	3.0	4.1	1.1
7	SE	Burgeo		11.61	6.49	3.0	6.5	3.5
7	a	Ramea		15.39	10.27	7.0	10.3	3.3
7	b	Grey River/La Poile/Grand Bruit/Francois (Drums)		21.08	15.96	9.0	16.0	7.0
8		Northern Peninsula South		7.05	1.93	1.5	1.9	0.4
9		Northern Peninsula North		11.29	6.17	4.0	6.2	2.2
10		Labrador-The Straits (Stove Oil Only)		12.66	7.54	7.5	7.5	0.0
11		Mary's Harbour-Cartwright Area (Stove Oil Only)		20.38	15.26	12.5	15.3	2.8
11	a	Labrador Coast- South (Isolated Marine Depots) Stove Oil Only		30.73	25.61	18.0	25.6	7.6
11	b	<i>Labrador Coast- South (Isolated Communities -Drum Deliveries via Coastal Freight Ferry) Stove Oil Only</i>		40.32	35.20	N/A	35.2	N/A
12		Central Labrador (Goose Bay and Area) Stove Oil Only		8.35	3.23	4.5	3.2	-1.3
13		Western Labrador (Labrador City / Wabush) Stove Oil Only		N/A	N/A	4.0	4.0	0.0
13	a	<i>Churchill Falls - Stove Oil only</i>		N/A	N/A	7.0	7.0	0.0
14		Labrador Coast - North (Isolated Marine Depots) Stove Oil Only		30.73	25.61	18.0	25.6	7.6

Notes: 1. Cost does not include delivery to households, only filling customer's drums or other containers at depot.

2. Italicised entries are calculations for deliveries that would be made if the delivery methods indicated were adopted.

With respect to the delivered cost of stove oil to consumers in Labrador, the existing differential from the base zone is a 4.5 cpl differential added to the base price of furnace oil plus the location differential calculated in this Study. It is understood that the 4.5 cpl retail differential between furnace and stove oil was initially established to accommodate both the

basic differential between the products, plus provide an appropriate allowance to cover product segregation and the cost of small deliveries of stove oil to more remote customers. Since stove oil is the only distillate heating fuel product used in Labrador, it could be justifiably argued that the portion of the cost allowance for segregation and small deliveries should be removed from the delivered price. If this practice were implemented, the product cost difference of 4.5 cpl would be reduced to 3.0 cpl, being the current rack price difference between the products. This would reduce the price of stove oil by 1.5 cpl throughout Labrador.

### **Heating Fuels - Notes on recommended price changes greater than 2.0 cpl:**

Zone 1ANW – Avalon North West - This newly recommended pricing zone recognizes the necessity of having a local bulk storage plant in the area in order to properly service the heating fuel market. There are now three existing bulk plants in the proposed zone. (See Figure 1-ANW in Appendix K for costing details)

Zone 1AS – Avalon South - This newly recommended zone also recognizes the necessity of having a local bulk storage plants in the area in order to properly service the heating fuel market. While some of the additional differential for Zone 1- Avalon North East of 4.1 cpl is due to bulk plant operations, a significant portion is due to the higher cost of tank wagon delivery throughout this dispersed area. (See Figure H1-AS of Appendix K)

Zone 1a – Bell Island - To ensure security of supply during the winter months, a bulk plant is necessary for this sub-zone. The recommended pricing differential increase of 2.3 cpl provides for a small bulk plant.

Zone 2 – Burin and Bonavista Peninsulas – The requirement of local area bulk plants for the majority of supply in this Zone and relatively high local delivery costs account for the recommended increase of 2.1 cpl in the existing differentials.

Zone 3b – Fogo Island: - Heating fuels for this market are primarily delivered to local bulk plants via tractor trailer from the Avalon and Come by Chance terminals. They are then delivered to local households by tank wagons. As detailed in Figure H3b of Appendix K, the cost of both these trucking operations dictate that the pricing differential be increased by 3.0 cpl.

Zone 3c – Change Islands: - Heating fuel for Change Islands is delivered by tank wagon via ferry from the Fogo Island bulk plants. The recommended price differential of an additional 3.8 cpl recognizes the costs involved with this supply method. (See Figure H 3c, Appendix K).

Zone 4 – Connaigre Peninsula: - A significant volume of the home heat supply for this market comes from the bulk plant at the Pool's Cove crossroads. This plant is supplied via tractor trailer from the Avalon Peninsula. The fuels are then delivered to households via tank wagon. The recommended differential takes into account all costs elements for this supply chain, which is depicted in Figure H4, Appendix K.

Zone 4a – Drums to remote communities from the Connaigre Peninsula: - The cost of delivering drums of heating fuel to remote communities via freight ferry plus a suggested 10.0 cpl retail margin allowance for handling the drums at the destination community adds up to significantly more than the existing differential. Suppliers in these communities have complained that the existing margin does not allow them to break even, but they continue supply as a service to the people in their community. The Consulting Team agrees that the total allowable margin should be increased to that indicated, albeit it is, in the case of this Zone 4a, an increase in the maximum retail price of 7.6 cpl. (See Figure H4a, Appendix K for supply chain details)

Zone 7SE – Burgeo: - This newly proposed zone is separated from the existing Zone 7 due to the higher cost of bulk plant operation and tank wagon delivery operations on a cents per litre basis due to the lower volume involved. As can be seen from Figures H7-W and H7-SE in Appendix K, the laid-in cost to consumer household tanks is 11.61 in the Burgeo zone versus 9.18 in the balance of area of Zone 7. This is the reason the separate zones are being recommended with an increased differential for the Burgeo Zone of 3.5 cpl.

Zone 7a – Ramea: - Heating fuel for the Island of Ramea has to be delivery by tank wagon and ferry from the bulk plant in Burgeo. As shown in Table H-7a of Appendix H, to make all household deliveries requires that the truck and driver overnight in Ramea in order to finish deliveries the following day before boarding the return ferry. This increases the cost of supplying heating fuel substantially and justifies the 3.3 cpl increase in the existing differential.

Zone 7b – Drums to remote communities from Burgeo: - The recommended differentials for these drum deliveries are calculated in Table H-7b of Appendix H and all cost elements of the supply chain are depicted in Figure H7-b of Appendix K. As was the case described for drum deliveries from the Connaigre Peninsula, here too a significant additional differential of 7.0 cpl is being recommended to cover all costs involved.

Zone 9 - Northern Peninsula North: - The requirement of local area bulk plants for heating fuel supply throughout this Zone and the relatively high local delivery costs account for the recommended increase of 2.2 cpl in the existing differentials.

Zone 11 – Lodge Bay to Cartwright: - The increase in differential of 2.8 cpl for stove oil reflects the recalculated increased operating costs for bulk plants and marine depots in this area.

Zones 11a and 14 – Labrador South and Labrador North – Isolated Communities – The current 18.0 cpl differential allowed for these zones is insufficient to cover the operating costs of these relatively low volume depots. In order to provide a 10.0 cpl dispensing fee to cover the operator’s wages, an overall increase in the allowable differential of 7.6 cpl is required.

### C. Pricing Differentials for Propane Heating Fuels Zones

A summary of the calculated costs of propane deliveries to each zone was presented in Table 12. These figures are the basis for the various price differentials for propane used for home heating purposes where tank wagon delivery is available throughout the province.

In Table 15 below, these costs are compared with current zone differentials. As indicated, the only significant variance is that for Zone 9, resulting in a recommended increase of 1.0 cpl for that zone. No change in zone boundaries is recommended for propane.

### Storage and Distribution Study

**Table 15**

#### Recommended Changes to Zone Price Differentials for Propane Heating Fuel

<b><u>Heating Fuels - Residential Propane</u></b>		Current Zone Price Differentials from Base Zone 2	Total Estimated Delivered Cost to Households Above Base Zone Delivered Cost	Recommended Revised Zone Price Differentials	Recommended Change From Current Differential
Zone	Zone Geographic Area	CPL	CPL	CPL	CPL
1	St. John's & Avalon	2.0	1.9	<b>2.0</b>	<b>0.0</b>
1a	Bell Island	3.0	3.0	<b>3.0</b>	<b>0.0</b>
2	Clarenville/ Burin-Bonavista Peninsulas ( <b>Base Zone</b> )	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
3	Central Newfoundland - Glovertown to Buchans	2.5	2.6	<b>2.5</b>	<b>0.0</b>
3a	St. Brendan's (Island)	N/A	N/A	N/A	N/A
3b	Fogo Island	N/A	N/A	N/A	N/A
3c	Change Islands	N/A	N/A	N/A	N/A
4	Connaigre Peninsula	3.5	3.4	<b>3.5</b>	<b>0.0</b>
4a	Gaultois to Francois / Rencontre East	N/A	N/A	N/A	N/A
5	Springdale & Baie Verte Peninsula	3.5	3.2	<b>3.5</b>	<b>0.0</b>
5a	Long Island	N/A	N/A	N/A	N/A
5b	Little Bay Island	N/A	N/A	N/A	N/A
6	Deer Lake - Corner Brook Areas	4.0	4.2	<b>4.0</b>	<b>0.0</b>
7	Gallants to Port aux Basques / Burgeo	5.0	5.4	<b>5.0</b>	<b>0.0</b>
7a	Ramea	N/A	N/A	N/A	N/A
7b	Grey River/ Grand Bruit / La Poile	N/A	N/A	N/A	N/A
8	Northern Peninsula - Gros Morne to Belburns	5.0	5.2	<b>5.0</b>	<b>0.0</b>
9	Northern Peninsula - to Englee and St. Anthony	6.0	7.1	<b>7.0</b>	<b>1.0</b>
10	Labrador Straits - L'Anse au Clair to Red Bay	N/A	N/A	N/A	N/A
11	Mary's Harbour to Cartwright (Road Access)	N/A	N/A	N/A	N/A
11a	Coastal Labrador – South (Isolated Marine Depots)	N/A	N/A	N/A	N/A
11b	Coastal Labrador – South (No Marine Depots)	N/A	N/A	N/A	N/A
12	Central Labrador - Goose Bay Area	N/A	N/A	N/A	N/A
13	Western Labrador - Labrador City / Wabush	N/A	N/A	N/A	N/A
13a	Churchill Falls	N/A	N/A	N/A	N/A
14	Coastal Labrador – North (Isolated Marine Depots)	N/A	N/A	N/A	N/A