1.0 Executive Summary

In the spring of 2001, the Government of Newfoundland and Labrador enacted legislation to regulate prices of petroleum products to retail consumers in the province. By the fall of 2001, base prices and a mechanism for their monthly adjustment had been established and the Petroleum Products Pricing Commission (PPPC) published the first set of maximum prices for retail automotive fuels and home heating fuels. At the same time, the PPPC established a number of pricing zones designed to account for cost differences in distributing petroleum products to various geographic areas of the province.

Since the fall of 2001, there has been little change in the boundaries of the established pricing zones or in the price differentials between them.

To ensure that the pricing zone structure continues to be fair to all stakeholders, the Commission issued a Request for Proposals for consultants to conduct a detailed review of pricing zone boundaries and their price differentials. In response to this public request, David M. French and Associates Inc. submitted a proposal and was subsequently engaged to undertake a Storage and Distribution Cost Study for all regulated petroleum products throughout Newfoundland and Labrador.

The consultant was to review all supply chains and distribution networks around the entire province and develop models as necessary to estimate costs of moving regulated products from initial arrival by marine tanker through storage, handling and final delivery to the end consumer. In this process, the consultant would examine the existing zone boundaries, the zone pricing differentials for each class of product, and recommend any changes that might be considered necessary to ensure a greater degree of fairness to all stakeholders. As part of the Study, the consultant was also requested to identify and report on all storage facilities around the province.

Confidentiality and Non-Disclosure Agreements were signed with some major oil companies and others players in the industry in order to gather as much information as possible. However, some operators would not agree to sign agreements nor supply relevant information on their operations. This lack of participation and cooperation, which was particularly relevant in the case of sole operators in certain areas, detrimentally impacted progress on the assignment. As a result, the consulting team had to undertake and develop extensive ‘cost modelling’ processes to arrive at realistic cost estimates and conclusions.

Field visitations were made to essentially all storage facilities in Newfoundland and Labrador. Cost schedules for marine freight into marine terminals and marine depots were constructed using proprietary figures normalized with information developed by the consulting team. The cost of storing and handling products at marine terminal locations was determined in a similar manner. In the case of the smaller marine depots along the Labrador Coast, little proprietary information was available. An operating costing model had first to be constructed for bulk storage plants and then extrapolated to estimate capital replacement and operating costs for these facilities.

Each class of product including automotive fuels, distillate heating fuels, and propane used for home heating purposes was then addressed in turn for delivery, either directly from marine terminals, through intermediate storage plants, or by other means to the end consumer. In some cases, the costs involved in the transportation of fuel in drums to remote communities had to be calculated to encompass the full product supply network.

The costs of each step in the process were then added to arrive at laid-in cost figures for each product for each zone and sub-zone. Laid-in costs for automotive fuels were determined to the 'wholesale point of sale' whereas for heating fuels, laid-in costs were determined to the consumer's storage tank or the 'retail point of sale'. Individual cost diagrams were also constructed for each product by zone to more clearly illustrate how the various cost calculations were applied to each link in the supply chain.

Zone boundaries were studied in detail for each class of product. It was concluded that existing zone configurations for automotive and propane home heating are appropriate as confirmed by the study data. However, three new home heat zones for furnace/ stove oil are recommended to address current inequities in costs primarily related to the necessity of local area bulk plants. In addition, some minor changes in zone designations for Pricing Zones 10, 10a and 11 are recommended to streamline pricing structures for these areas for all products.

The total costs to the wholesale point of sale determined for automotive fuels in each zone were compared with existing differentials from the Avalon base zone. Adjustments in existing differentials are recommended and range from a reduction of 1.9 cents per litre (cpl) to an increase of 5.9 cpl.

Total costs for furnace and stove home heating fuels were determined to their retail points of sale and compared with existing differentials from the Avalon base zone. In addition to zone differentials developed for the recommended three new zones, the remaining adjustments to existing differentials range from –1.3 cpl to +7.6 cpl.

Recommended adjustments in zone differentials for propane used as a heating fuel are confined to a single zone where a 1.0 cpl increase is considered appropriate.

Through the visitation process, a listing of a total of 78 operational and non-operational storage terminals, depots and bulk plants was developed. Photos of these facilities are included in Appendix L to this report.