Competition Tribunal   Tribunal de la Concurrence

PUBLIC VERSION

Reference: *The Commissioner of Competition v. Superior Propane Inc.*, 2000 Comp. Trib. 15
File no.: CT1998002
Registry document no.: 192b

IN THE MATTER OF the *Competition Act, R.S.C. 1985, c. C-34, and the Competition Tribunal Rules, SOR/94-290*, as amended;

AND IN THE MATTER OF an inquiry pursuant to subsection 10(1)(b) of the *Competition Act* relating to the proposed acquisition of ICG Propane Inc. by Superior Propane Inc.;

AND IN THE MATTER OF an application by the Commissioner of Competition under section *92 of the Competition Act.*

B E T W E E N:

The Commissioner of Competition
(applicant)

and

Superior Propane Inc.
ICG Propane Inc.
(respondents)

Dates of hearing:	19990923, 24, 27-29; 19991004-08, 13-15, 18-21, 25-29; 19991101-03, 23, 25, 29, 30; 19991201-03, 06-09, 13, 14; 20000119, 24, 31; 20000201-04, 07-09
Members:	Nadon J. (presiding); L.R. Bolton (19990923 to 19991103); C. Lloyd (19991129 to 20000209); and L.P. Schwartz
Date of order:	20000830
Order signed by:	Nadon J.

REASONS AND ORDER

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GUIDE TO ACRONYMS

2SLS	two-stage least squares
cpl	cents per litre
EBITDA	earnings before interest, taxes, depreciation and amortization
IOL	Imperial Oil Limited
mbpd	million barrels per day
MEG’s	*Merger Enforcement Guidelines*
OLS	ordinary least squares
SMS	Superior Management Services Limited Partnership

I. <u>INTRODUCTION</u>

[1] An application is brought by the Commissioner of Competition ("Commissioner") pursuant to section 92 of the *Competition Act*, R.S.C. 1985, c. C-34, (the "Act") for an order to dissolve the merger of Superior Propane Inc. ("Superior") and ICG Propane Inc. ("ICG") or otherwise remedy the substantial prevention or lessening of competition that is likely to occur in the market for propane in Canada upon the implementation of the said merger.

[2] The application arises by reason of Superior's acquisition of ICG on December 7, 1998. Prior to the acquisition, Superior submitted a short-form prenotification filing pursuant to section 121 of the Act to the Competition Bureau regarding its proposed acquisition of all of the shares of The Chancellor Holdings Corporation, a wholly-owned subsidiary of Petro-Canada. The Chancellor Holdings Corporation, in turn, owned ICG. An inquiry into this merger was commenced by the Commissioner on August 14, 1998, pursuant to section 10 of the Act. On December 6, 1998, following two days of hearing, the Tribunal dismissed the Commissioner's application of December 1, 1998 brought under section 100 of the Act for an order forbidding the closing of the transaction for a period of 21 days. Further, on December 11, 1998, a consent interim order was issued by the Tribunal to hold separate the assets of Superior and ICG, excluding the non-overlapping locations situated in areas where Superior had no market presence.

[3] Superior is a corporation constituted under the laws of Canada and is engaged primarily in the retailing and wholesaling of propane, as well as in the sale of propane consuming appliances and equipment and related services in all 10 provinces and territories. All of the outstanding shares of Superior are owned by the Superior Income Trust Fund (the "Fund"), a limited purpose trust established for the purpose of holding debt and equity of Superior. The Fund has issued trust units which are listed on the Toronto Stock Exchange.

[4] ICG is a corporation constituted under the laws of Canada and is engaged in selling and distributing propane and providing related services to customers in all Canadian provinces and territories except Prince Edward Island, Newfoundland and to a lesser extent, Nova Scotia. ICG operates through a network of company-owned distribution outlets and independent dealers located throughout its sales and distribution areas. In 1990, Petro-Canada indirectly acquired ICG and combined Petro-Canada's retail propane operations with ICG's business.

[5] The Commissioner alleges that the merger will create a dominant national propane marketer and in several markets, a dominant local propane marketer. Both Superior and ICG compete against each other in the same geographic and product markets through their operations of propane distribution systems and wholesale supply of propane to agents and dealers.

[6] Interlocutory proceedings in this matter were lengthy and vigorously contested. Upon application by the Commissioner, an interim order was issued on December 11, 1998 to preserve ICG's business as independent and viable pending the Tribunal's decision on the application. Various orders regarding confidentiality of documents and the scope of discovery were issued by the Tribunal.

[7] Following the illness and inability of a panel member, Lorne Bolton, to attend the hearing in this matter, an Order Regarding the Constitution of a New Panel was issued on December 13, 1999. This order terminated the hearing before the panel constituted of Mr. Bolton, Dr. Schwartz, and Nadon J. and further constituted a new panel composed of Ms. Christine Lloyd, Dr. Schwartz and Nadon J. pursuant to section 10 and subsection 12(3) of the Competition Tribunal Act. The evidence on the record of the previous proceedings, including all the orders and rulings made by the Tribunal, were entered into the record of the hearing before the new panel pursuant to section 70 of the *Competition Tribunal Rules.*

[8] The hearing of this matter took 48 days, 91 witnesses including 17 expert witnesses were called and a large number of documents were entered as exhibits.

II. PROPANE BUSINESS

[9] Propane is a chemical commodity produced as a by-product of natural gas extraction and of crude oil refining. In Canada, 85 percent of propane production is derived from natural gas and accordingly is produced in the Western Canadian Sedimentary Basin. Propane volumes from crude oil are produced at oil refineries that are generally closer to population centres where the consumption occurs (e.g., Edmonton, Southern Ontario, Montreal, Quebec City).

[10] Propane sourced from gas production is extracted and transported mixed with other natural gas liquids to fractionation sites where separation into "specification propane" takes place. In Canada, raw natural gas liquids are transported from producing regions in Alberta and northeast British Columbia via pipelines to "hubs" at Edmonton/Ft. Saskatchewan and at Sarnia, Ontario, where fractionation takes place. Fractionation into specification propane also takes place at straddle plants along pipelines and gas field plants in Alberta for marketing to western Canada.

[11] Approximately 63 percent of propane produced in Canada is exported to the United States (expert affidavit of G. Mathieson (18 August 1999): exhibit A-2073 at 15). According to Statistics Canada data which are themselves disputed, total domestic consumption of approximately 77 million barrels per day ("mbpd") in 1998 occurred in the segments of residential/commercial/agricultural for space and water heating, cooking, appliances, crop drying (32 mbpd); industrial uses, e.g., forklifts, heating (17 mbpd), collectively, the "traditional segments"; in transportation, primarily automobile fuel (18 mbpd); and petrochemical feedstock (10 mbpd). Consistent with industry usage, "retail propane" includes total propane consumption less propane consumed as petrochemical feedstock and propane consumed by producers.

[12] Although it appears that there are discrepancies in the consumption data published by different sources, autopropane consumption seems to have peaked in 1994 at 23 mbpd, stimulated by government-supported fleet conversions, and then declined steadily as those programmes of financial assistance were ended along with other factors including the improved efficiency of gasoline engines.

[13] Consumption of propane used as a heating fuel is subject to seasonal fluctuation and dropped dramatically from 39 mbpd in 1997 to 32 mbpd in 1998 due to warmer weather. Consumption in the industrial and petrochemical feedstock segments appears to have levelled. It seems that Canadian propane consumption is characterized by stable demand or modest growth at best.

[14] There is some dispute as to the number of propane marketers operating in Canada. ICG's amended preliminary prospectus claims approximately 75 propane marketers including Superior, while Superior claims a total of 189 independent propane distributors. These propane marketers obtain propane supplies at refinery racks and at storage facilities owned by the major propane producers at prices based on postings at the Edmonton or Sarnia hubs and varying with the distance between these hubs and the supply point. Large marketers typically purchase their supplies under contracts that specify volume and price, or a pricing formula in terms of price per litre. These buyers may own or rent storage space close to the supply points which allows them to enter into "keep dry" arrangements at lower prices from producers. A keep-dry arrangement requires the buyer to take propane sufficiently regularly so that the producer does not have to maintain storage and, therefore, sells at a lower price to a buyer capable of honouring its commitments.

[15] These buyers transport propane by truck or rail to their local storage facilities (primary distribution). Secondary distribution occurs when delivery to customers is made, usually by truck, from these local storage facilities.

[16] Smaller propane marketers purchase propane on spot markets from the producers or from the larger marketers. In some cases, a smaller marketer acts as an agent in a local area for a major marketer that does not have a local delivery capability. For such arrangements, the customer contract is held by the major marketer who determines the pricing. Another relationship is the "bulk dealer", whereby a local company purchases propane from a major marketer under an agreement that specifies a territory in which that local dealer will not face competition from the major marketer or any of its other bulk dealers.

[17] Propane marketers tend to be local and regional in their operations. At present, only two companies, Superior and ICG, supply end-users across Canada, either directly or through agents and dealers. The merging parties are well suited to supply customers that demand propane at multiple locations across the country.

[18] The customer relationship is most frequently contractual. Almost all propane marketers undertake to deliver propane on a regular basis to customer locations at the prevailing price established by the marketer from time to time for a specific term with agreements lasting up to five years. The customer is free to terminate the contract on sufficient notice, but as the contract will often contain "meet or beat" and/or "right of first refusal" clauses, the current supplier may be able to maintain the customer's business.

[19] In addition to delivering the propane, particularly to residential customers, the marketer usually provides customer storage tanks on a rental basis and installs and services propane-related equipment. It appears that most marketers do not fill a residential tank that they do not own.

[20] Propane delivery is a regulated activity in all jurisdictions. Propane storage tanks and customer tanks must meet various safety standards, and the individuals who handle the propane must be licensed.

[21] Although specification propane is a well defined commodity, the propane marketing companies generally differ with respect to reputation, length of time in the business, the terms and conditions they offer to customers, the ability to meet a customer's needs at multiple locations, etc. In addition, some marketers specialize in serving certain segments, while others seek customers in all segments. The result is that the "product" provided by a propane marketer is often differentiated on these dimensions from the offerings of its competitors.

III. <u>MARKET DEFINITION</u>

A. PRODUCT MARKET

[22] With respect to product market definition, the Commissioner submits in final argument that the relevant product market is the supply and delivery of propane, propane equipment and related services to retail and wholesale customers. The Commissioner also submits that the relevant product market can be further broken down into various end-uses and customer classifications including: residential, agricultural, commercial, industrial (collectively, the "traditional" segment), automotive, national and major account customers. As propane and related equipment and services appear to be strong complements, it will be convenient to define one product market rather than consider the three separate business lines mentioned.

[23] The Commissioner alleges, in effect, that retail propane constitutes, by itself, a market over which market power can be exercised. Such a market will be referred to as a "competition market". The respondents assert that it is not a competition market because alternate fuels exist and consumers can and do easily switch to these alternatives. Their position is that retail propane is part of a broad energy market and hence that any attempt to exercise market power over retail propane could not be successful.

(1) Commissioner's Position

[24] The Commissioner's experts, Richard Schwindt and Steven Globerman, presented a report evaluating the competitive effects of the proposed merger between Superior and ICG. With respect to product market definition, they provided opinion evidence that retail propane is the relevant competition market (expert affidavit of R. Schwindt and S. Globerman (16 August 1999): exhibit A-2056). They conclude that switching from propane to alternate fuels is difficult. For example, regarding residential heating applications, Professors Schwindt and Globerman observe, at page 10 of their report, that while most propane appliances can be readily converted to natural gas, nevertheless "in residential households where the piping from the outside of the house to the furnace is sized for propane and not for natural gas, conversion costs can be quite high". Further, regarding electricity, they observe at page 11 of their report that "at this time and into the foreseeable future, the price of electricity is so high relative to propane in several parts of the country that it is an unlikely substitute".

[25] Further, Professors Schwindt and Globerman observe that heating oil could be a substitute for propane although propane is superior to oil with respect to cleanliness, environmental impact and odour. Convenience, storage requirements and capital costs do not differ significantly between the two fuels. However, their estimated costs of converting a residence in the Lower Mainland of British Columbia from a propane to an oil fired forced air furnace range from $4,500 to $5,300. At pages 12 and A-2 of their report, they conclude that it would take very significant price increases, in the range of 50 to 60 percent, to justify a switch to fuel oil. At page A-3, they conduct a similar analysis regarding switching from propane to heating oil in commercial heating and from propane to electricity for forklift trucks which leads to the same conclusion.

[26] Regarding autopropane, Professors Schwindt and Globerman note at page 19 of their report that substitutability of alternate fuels, particularly gasoline, depends upon whether the vehicle is dual-fuel or dedicated to propane. They infer from an Imperial Oil Limited ("IOL") document that 95 percent of conversions to propane in British Columbia in the early 1990’s were for commercial vehicles and nearly all of those were "propane dedicated" rather than dual-fuel, suggesting that substitution is slight.

[27] The Commissioner further submits that switching costs are high and "create a lock-in effect for customers" with the result that cross-elasticity of demand is low.

[28] The Commissioner submits that the payback period for changing related equipment and appliances from propane to alternate fuels may be significant. He states that, for instance, the life-cycle for fuel related equipment and appliances for the traditional sector such as residential furnace is on average in the range of 15 to 25 years. Therefore, a customer facing a propane price increase would have to consider this factor before converting this equipment.

[29] In this regard, the Commissioner cites a study commissioned by ICG and produced by M. Paas Consulting Ltd. in August 1999, dealing with locations and markets where alternative fuels may pose either a competitive threat or an opportunity for ICG (exhibit A-2099). The study measures customer payback to switching fuel types (i.e., the time it would take for the savings in fuel costs to match the initial outlay for switching) under two scenarios: (a) when the existing appliance has useful life remaining, and (b) where the appliance requires replacement. The study demonstrates that converting from propane to electricity or fuel oil, for most of the seven end-uses analysed, involves long and, in many cases, infinite payback periods and hence does not make economical sense in the short to mid-term when factoring all the relevant switching costs and not only the cost of the fuel.

[30] The Commissioner also called a number of factual witnesses who testified that switching to alternate fuels was impeded by the difficulty and inconvenience of breaking existing contracts for supply and equipment. The inconvenience includes the difficulty in coordinating the removal of existing equipment and the installation of new supplier’s equipment in a timely fashion (e.g., to avoid plant shut down or loss of residential heating), the cost of removing the leased equipment and the delays associated with getting a refund for the propane left in the tank. Superior’s own public share offering documents (exhibits A-10 at 03890 and A-202 at 03899) emphasize these barriers to customer switching.

[31] With respect to conversion costs, the Commissioner presented the evidence of a factual witness, Marilyn Simons, a residential user of propane from Renfrew, Ontario, who evaluated the costs to convert her home furnace from propane to heating oil, her propane stove to an electric stove and to replace her propane fireplace with wood-burning equipment. The total conversion costs amounted to approximately $12,300. Some witnesses testified that conversion costs would prevent them from switching to alternate fuels while others testified that an increase in the price of propane would have to be very significant before such conversion was made.

[32] The Commissioner submits that there is only imperfect substitutability of alternate fuels for propane. In particular, he concedes that propane consumers do switch from propane to natural gas when this option is available and that, therefore, natural gas displaces rather than competes with propane.

[33] The Commissioner also introduced the expert evidence of David Ryan and André Plourde whose report provides "empirical evidence concerning the role, importance and substitutability of propane as an energy source in Canada" (expert affidavit of D. Ryan and A. Plourde (16 August 1999): exhibit A-2076 at paragraph 1(a)). They studied energy consumption for propane, electricity, natural gas, refined oil products and wood in three sectors (residential, industrial and commercial) for each province or region depending on data availability. Then, using Statistics Canada and other government data from 1982 to 1996, the last year for which all of the relevant data series were available, they estimated short-run and long-run cross-price elasticities and own-price elasticities of propane demand for the years 1990 and 1996.

[34] At paragraph 6.3.4(a) of their report, Professors Ryan and Plourde find that in about 35 percent of the cases considered, the own-price elasticity of propane demand is negative and significant, while it is positive and significant in fewer than four percent of the cases. The own price elasticity of demand is the percentage change in quantity of the product consumed that results from a one percent price increase in its price. In all other situations considered, no significant relationship between the quantity of propane demanded and its price can be detected. They conclude that, in general, a change in the price of propane will lead to smaller than proportional reductions in propane consumption, i.e., that propane demand is inelastic.

[35] Regarding cross-price elasticity, statistically significant responses to propane price changes were identified in approximately 45 percent of the cases considered with substitution relationships outnumbering complementarity by a factor of about two-to-one. However, with the exception of oil products in Saskatchewan/residential and Quebec/industrial for 1996, all cross-price elasticities reported were less than one in absolute value. Indeed, in only two cases do cross-price elasticities exceed 0.6 in absolute value. They conclude that changes in propane prices induce proportionally smaller changes in the consumption of other energy types and, therefore, that propane and other energy types form different markets in the provinces/regions in Canada.

[36] Although arguing for an "all propane" product market, the Commissioner suggests through expert evidence that certain end-use segments constitute relevant markets in themselves. This would indicate that if, for example, market power could be exercised in residential propane but not in the other end-use segments, then it would properly constitute a relevant competition market, and total consumption and market shares would be calculated within that segment.

[37] At page 1 of their report (exhibit A-2056), Professors Schwindt and Globerman conclude that "retail propane distribution does constitute a relevant product market", despite the fact that they find evidence of segmentation among suppliers and customers and they suggest that this segmentation is strong enough to qualify theses segments as separate product markets. They conclude at page 23 of their report as follows:

> . . . However, given the limited availability of data with respect to market structure by geographical market, application, and in some cases customer, it would not be possible to determine the differential effects of the merger on competitive conditions across more rigorously and narrowly defined product markets. Moreover, the analysis that follows *would not be fundamentally altered by adopting a more refined product market definition.* (emphasis added)

[38] Finally, the Commissioner argues that "national accounts" are a separate category of business in which the merged entity will be in a position to exercise market power. According to the Commissioner, a significant component of the customer base of each of the merging firms is the national and major accounts which have multiple locations spanning one or more regions across Canada.

(2) Respondents' Position

[39] The respondents' position on the relevant product market is that propane competes with alternative fuels in the energy market and for each end-use, different alternate fuels are substitutes. They assert that interchangeability of propane and alternate fuels together with the evidence of inter-industry competition and the views of industry participants strongly indicate that propane and alternate fuels compete in the same market.

[40] On the matter of customer switching, the respondents referred to the evidence of William Katz, a senior executive of AmeriGas Propane Inc. ("AmeriGas"), who testified that customers would switch to propane when it could be demonstrated that switching was economically attractive for them and not only at the end of the useful life of the equipment (transcript at 15:2602-604 (19 October 1999)). Mr. Katz also indicated that AmeriGas had success in switching customers to propane well before the end of the useful life of their existing equipment.

[41] Further, the respondents assert that every year, a substantial number of propane and alternate fuel customers replace their existing equipment or make an initial fuel choice and accordingly choose from among the "entire menu" of fuel choices. The respondents note that customers making an initial fuel choice or replacing existing equipment face no incremental switching costs and, therefore, that customers whose equipment is in mid-life cycle pay the same price as those who are at the end of the cycle.

[42] The respondents argue that propane industry views support the substitutability of alternative fuels. They state as an example that Steven Sparling of Sparling's Propane Company Limited ("Sparling") testified that his company considered any energy provider a competitor. This includes electricity, natural gas, fuel oil and propane marketers.

[43] The respondents also submit that the Tribunal in the context of denying an injunction to the Commissioner in this case (see Director of Investigation and Research v. Superior Propane Inc. (1998), 85 C.P.R. (3d) 194 at 207, 208, [1998] C. C. T. D. No. 20 (QL)) acknowledged the statements made by Superior and ICG in their securities filings regarding competition between propane and alternate fuels. At the time, Rothstein J. accepted that they were competing in a wide energy market on the basis that the statements contained in the prospectus and annual reports and in ICG's preliminary prospectus were "of some significance" and something upon which he should "place weight".

[44] The respondents also assert that supply substitution is possible and that the relevant market should take account of firms that can easily switch their facilities to propane marketing. They submit that it is appropriate to include upstream industry participants and industrial gas companies as well as other distributors of alternate fuels.

[45] Finally, the respondents suggest that the analysis conducted by the Commissioner's experts, Professors Ryan and Plourde, explicitly recognizes that alternate fuels and propane are substitutes in various places at various times for various end-uses.

(3) Analysis

[46] There is clearly no commonality in the positions of the parties before the Tribunal on the appropriate definition of the product market. Accordingly, the Tribunal must decide which evidence is the more convincing.

[47] The purpose of defining the relevant product market is to identify the possibility for the exercise of market power. This purpose was clearly asserted in the two previous merger cases heard by the Tribunal. In Director of Investigation and Research v. Southam Inc. (1992), 43 C.P.R. (3d) 161 at 177, 178, [1992] C.C.T.D. No. 7 (QL), the Tribunal reiterated:

> The general issues with respect to the definition of a market in a merger case have been set in the *Hillsdown Holdings (Canada) Ltd.* decision, *supra.* The relevant market for purposes of merger analysis is one in which the merging firms acting alone or in concert with other firms could exercise market power. Market power is the ability of a firm or group of firms to maintain prices above the competitive level. Market power may also be exercised by offering, for example, poor service or quality or by restricting choice. When used in a general context, "price" is thus a shorthand for all aspects of firms' actions that bear on the interest of buyers . . . .
>
> The delineation of the relevant market *is a means to the end of identifying the significant market forces* that constrain or are likely to constrain the merged entity. . . .
>
> The critical issue is to ensure that all factors have been considered that have a bearing on whether there has or is likely to be a prevention or lessening of competition to a substantial degree. (emphasis added)

[48] While market definitions should be as precise as possible within the limit of reasonableness to provide a framework within which competition implications of a transaction can be analysed, the Tribunal should not be preoccupied with market definition to the point of losing sight of the purpose of the exercise under the Act which is to determine whether the merger is likely to lead to a substantial prevention or lessening of competition. As stated by the Supreme Court of Canada in *Director of Investigation and Research v. Southam Inc.*, [1997] 1 S.C.R. 748 at 788:

> . . . More generally, I notice that the Tribunal seems to have been preoccupied with the definition of the relevant market. It is possible that the members may occasionally have lost sight of the ultimate inquiry, which is whether the acquisition of the community newspapers by Southam substantially lessened competition.

[49] In the Tribunal’s view, the factual and expert evidence on substitutability is very important. The Tribunal distinguishes between "switching" in its common sense meaning and substitutability in the economic sense; it is the latter that is important in delineating a relevant product market. It may be, as the respondents claim, that at the end of the useful life of their heating or other energy-using equipment, consumers do switch to propane from alternate fuels depending, in part at least, on differences in fuel prices. However, this behaviour demonstrates de novo choice; at the end of their equipment life cycle, those consumers are in the same position as when they first chose a fuel. This behaviour is not evidence of substitutability, which refers to changing a consumption pattern in response to a price change with all other determinants of change, including the age of equipment, held constant.

[50] Mr. Katz stated that AmeriGas was successful in attracting customers to propane from other fuels before the end of the useful life of their existing equipment. However, he provided no quantitative evidence as to AmeriGas’s success in this regard and accordingly, it is difficult for the Tribunal to judge the extent of such success.

[51] Mr. Sparling’s testimony is that Sparling is seeking to attract new propane customers in the new housing developments. If Sparling is successful, it is evidence that such customers are making fuel choices as a consequence of a decision to relocate. While this residential location decision may involve a change in fuel, it does not demonstrate that the price of propane was the reason for the move and hence does not provide evidence of substitution.

[52] In its 10-K securities filing in the United States, AmeriGas makes similar comments about competition from alternate fuels. However, in the absence of evidence showing significant customer switching during the life of the existing equipment, the Tribunal is of the view that the evidence of AmeriGas does not support the substitutability of alternate fuels for competition market purposes.

[53] As to the views of industry participants, Sparling may well be correct in some long-term sense in its view that propane competes with all alternate fuels. However, no evidence indicates that Sparling’s behaviour is affected by inter-fuel competition. According to Mr. Sparling, the company is mainly concerned about "consistent pricing" from customer to customer and not with pricing in relation to alternate fuels (transcript at 12:1731 (14 October 1999)). Moreover, Sparling has not experienced customers switching to other fuels other than natural gas (ibid. at 1733).

[54] Hence the Tribunal does not accept that propane industry views support the substitutability of alternate fuels in the mind of consumers. Indeed, witnesses consider alternate fuels for the most part at the end of equipment life cycle, rather than in a shorter period of time in which market power could be exercised and which is relevant for merger review.

[55] As to the conclusions drawn by Rothstein J. in denying the injunction sought by the Commissioner, it suffices to note that he did not have the benefit of the extensive record and expert opinions that were produced during the 48-day hearing of the application under section 92.

[56] The Tribunal notes that the Act does not require that markets be delineated. However, the Tribunal accepts that the delineation of competition markets is one way of demonstrating the likely competitive effect of a merger and that, where such an approach is valid, the competition market adopted must be relevant to the purposes and goals of the merger provisions of the Act, which focus on the creation or enhancement of market power. In this connection, the Tribunal notes that there could be many competition markets containing retail propane. For example, it might be found that market power could be exercised over a product market consisting of retail propane, fuel oil, natural gas and electricity or any sub-group thereof. The share of retail propane in a market becomes larger as products are removed from the definition of the market. It is not clear, however, that any such market is the relevant competition market.

[57] The Tribunal believes that it is important to provide a principled basis in this regard in order to avoid gerrymandering of market boundaries. To determine which set of products is the relevant one for the purpose of merger review under the Act, the Tribunal agrees with the approach taken in the *Merger Enforcement Guidelines* ("MEG's") (Consumer and Corporate Affairs Canada, Director of Investigation and Research, *Merger Enforcement Guidelines,* Information Bulletin No. 5 (Supply and Services Canada, March 1991)), which seeks to identify the smallest competition market, in terms of the number of included products, over which market power could be exercised. Thus, if market power can be exercised over a market consisting only of retail propane, then that market is the competition market that is relevant for merger review.

[58] In this matter, the Tribunal accepts the statistical evidence of Professors Ryan and Plourde. Their evidence on cross-elasticity of demand clearly establishes that there are only a few areas of the country where substitution has occurred. Moreover, where substitution was found, the extent thereof was found to be small.

[59] The cross-price elasticity of demand concept is frequently used in market definition. This measure identifies a product as a substitute if its quantity demanded rises when the price of the good in question rises. For any pair of products A and B there will be two such elasticities (the percentage change in consumption of product A when the price of product B increases by one percent, and the percentage change in the consumption of product B when the price of product A increases by one percent). Absent direct evidence thereto, there is no reason to suppose that these two cross-price elasticities of demand will be equal or even that both will be positive; in short, there is no such thing as the cross-price elasticity of demand. Therefore, cross-elasticity evidence showing that B is a substitute for A does not establish that A and B are substitutes for each other and hence is not sufficient to place products A and B in the same competition market. To use cross-elasticity of demand for this purpose would require further evidence that A is also a substitute for B.

[60] The respondents' expert witness, Dennis Carlton, agreed in his testimony that both cross-elasticities of demand would be needed in order to place two products in the same competition market. The Commissioner implicitly adopts this approach when stating that, because of its lower price, natural gas "displaces" propane in an area when natural gas becomes available. This statement indicates the Commissioner's view that once propane users have switched to natural gas, they do not switch back; but since switching in the opposite direction does not occur, therefore, propane and natural gas cannot constitute a competition market. The Tribunal agrees that to show that natural gas and propane are in the same competition market would require evidence that propane customers switch to natural gas when the price of propane increases as well as evidence that natural gas customers switch to propane when the price of natural gas increases. In other words, reciprocal substitutability must be demonstrated. The displacement argument suggests only one-way substitutability between propane and natural gas. Therefore, the Tribunal is not convinced that natural gas and propane constitute a competition market.

[61] The more important limitation on the use of the concept of cross-price elasticity of demand to delineate markets is its indirect relevance to the exercise of market power. The definition of the relevant competition market does not depend on identifying particular substitutes in some pairwise fashion. Rather, the important question is whether, on a price increase by a firm, enough of its sales would be lost to all competing products, regardless of their number or identity, to make the price increase unprofitable. If this were the case, then a relevant competition market would not be found; that firm would not be able to exercise market power. A cross-elasticity estimate may identify a substitute and can be helpful in delineating a market, but it does not directly measure the ability of a firm to raise the price.

[62] As the Supreme Court of Canada stated in *Southam*, cited above at paragraph [48], at page 760, evidence of demand elasticities when available and reliable can be determinative for market definition. Thus, the Tribunal believes that the own price elasticity of demand is the correct elasticity for defining competition markets and should be preferred over cross-price elasticity of demand for the reasons above.

[63] The Tribunal places greater weight on Professors Ryan and Plourde's evidence regarding the "own-price elasticity of demand" as this concept is directly related to the issue of market power and hence to market delineation. The evidence demonstrates that the demand for propane is inelastic with respect to changes in its price, i.e., that consumers reduce their consumption of propane only slightly when the price rises. Although the data did not permit Professors Ryan and Plourde to measure retail propane demand by local market, their results were not challenged on this basis and the Tribunal is satisfied that propane demand is inelastic with respect to price for time periods for which the Act is intended to apply.

[64] Thus, consistent with the approach taken in the MEG's, cited above at paragraph [57], if retail propane were hypothetically monopolized, that monopolist would face an inelastic demand curve and, according to conventional monopoly theory, would raise the price at least to the point where demand became elastic. Once the monopolist was operating on the elastic portion of the propane demand curve, further price increases would be imposed only if they were profitable.

[65] Accordingly, if retail propane demand is so price-sensitive (i.e., elastic) that a hypothetical monopolist that was the only current and future seller would not impose a significant and non-transitory price increase, then retail propane cannot be a relevant competition market and the market would have to be expanded to include another fuel. However, if the demand curve is sufficiently insensitive (i.e., inelastic) to price increases, then a monopolist would impose a significant price increase and the competition market would not be expanded. Therefore, there is a critical or "cutoff" level for the own-price elasticity of demand at the pre-merger price against which the measured own-price elasticity of the good under review could be compared in order to determine whether the relevant market has been identified. (For a general discussion of elasticities and market delineation, see G.J. Werden, "Demand Elasticities in Antitrust Analysis" (1998) 66 Antitrust L.J. at 363-414.)

[66] To counter a claim that a hypothetical monopolist would raise the price would require evidence that the pre-merger price was already above marginal costs. However, the respondents did not present such evidence.

[67] Other indicia such as functional interchangeability, inter-industry competition as well as the views of industry participants constitute indirect measures of substitutability and are often used to identify products in the relevant market, particularly when direct evidence on elasticities of demand is not available. However, it must be remembered that the relevant competition market is the smallest set of products over which market power can be exercised and these indirect measures do not identify that set of products for competition purposes. A competition market is defined for the express purpose of measuring market power and may only loosely be related to markets as defined by business people whose definition is determined by profit maximisation considerations.

[68] The respondents' definition of the product market relies heavily on the functional interchangeability of propane and alternate fuels (functional test) and the evidence of inter-industry competition of a few witnesses but does not consider the evidence of elasticities which had been considered by the Supreme Court in the *Southam* decision, cited above at paragraph [48], as determinative when available. While functional interchangeability can indicate something about the possibility of substitution between two or more products, it does not convey any information about the actual or likely consumer behaviour in response to the exercise of market power.

[69] In that regard the evidence drawn from actual behaviour (i.e., the elasticities) and the opinions provided by expert witnesses such as Professors Ryan, Plourde, Schwindt and Globerman carry more weight in the Tribunal's opinion as to what products constitute the relevant competition market. Consequently, the Tribunal finds that the relevant competition market is "retail propane" and excludes other fuels.

(4) Segmentation

[70] Evidence that propane consumers systematically pay different prices depending on their end-use, and that such differences are not justified on the basis of cost differences, is necessary to support a finding of separate competition markets by end-use. However, no such evidence has been provided. Professors Schwindt and Globerman examined individual end-use categories and seemed to suggest that since market power could be exercised in each segment, therefore, a monopolist of all segments would be able to price-discriminate. While this is certainly possible, one would need to be sure that the price elasticity of demand varied systematically across end-uses so that a monopolist could exploit those differences. Professors Schwindt and Globerman did not present evidence on such differences. Professors Ryan and Plourde's evidence was suggestive in that regard; however, they did not advocate end-use markets.

[71] Indeed, Professors Schwindt and Globerman suggest at page 36 of their report (exhibit A-2056) that there are price differences among propane consumers within the same segment; this could reflect perfect price discrimination. However, since demand elasticities are unlikely to vary significantly by consumer in the same end-use segment and geographic market, it is possible that they have identified price dispersion reflecting lack of complete consumer information rather than perfect price discrimination by end-use by a seller with market power.

[72] Finally, at page 2 of their report, Professors Schwindt and Globerman consider that supply side segmentation supports separate relevant competition markets by end-use. Their argument, which is premised on product differentiation, is confusing. Differences among suppliers do not indicate differences in price-elasticity of demand by end-use segment. In light of the evidence, the Tribunal is not satisfied that separate competition markets by end-use have been established.

(5) National Accounts

[73] The Commissioner alleges that national accounts are a separate category of business in which the merged entity will be in a position to exercise market power and that the appropriate geographic market for analyzing national account competition is Canada.

[74] The respondents submit that the Commissioner's experts, Professors Schwindt and Globerman, opined that national accounts did not constitute a separate product market.

[75] In the Tribunal's understanding, a national account customer is a consumer of propane at several sites across the country, or at least across a number of widely-dispersed geographic markets, such that the consumer finds it more convenient to contract for propane supply from one marketer with national operations or capabilities rather than from several marketers in local markets. Witnesses indicated a variety of reasons for preferring to obtain supply from a national marketer. John Fisher of U-Haul Ontario stated that one reason was the ability to negotiate a single price, or price formula, that allows U-Haul to charge the same price for propane at all of its 376 locations across the country. Michael Stewart of Canadian Tire emphasized the need for consistency of delivery, training and safety at all 96 store sites and 40 petroleum sites. Carole Bluteau of CN Rail noted the administrative problems of dealing with multiple local vendors given that propane represents such a small portion of CN's fuel purchases.

[76] Claude Massé of CP Rail noted that dealing with several suppliers was inconvenient not only in terms of multiple invoices and cheque handling, but also in problem-solving. In addition to centralized billing, he valued the capability with a national supplier of dealing with only one person to resolve issues at all sites, rather than contacting the local manager for each. Indeed, he allowed that there might even be some savings in direct costs of propane supply by using multiple, lower-priced suppliers because the administration of invoices (currently 100 bills per month) could be handled by existing personnel. However, propane pricing was not his reason for preferring a national supplier:

> . . . But the pricing, it's not an issue – it's not the first base of this, the plan to go with one. It was more the product itself, the service.
>
> I would hate to go to a small company who the staff, if it doesn't have the expertise and the training, and then would fuel up a propane tank and then it blows up. The safety of our people is also important. transcript at 10:1506, 1507 (8 October 1999).

[77] It appears to the Tribunal that national account purchasers seek the management and administrative efficiencies that arise from doing business with a sole supplier. These efficiencies define a product that might be termed "national account coordination services", the price of which is difficult to observe because the product is bundled with the propane itself.

[78] National account coordination services are provided only by those propane marketers with national capabilities, specifically Superior and ICG. Several witnesses noted that when they tendered for a national supplier, they sought bids only from these companies. In addition, when a national account customer had a problem with its national supplier, it approached the other for supply.

[79] The evidence is that firms who use a national supplier do so for a variety of reasons largely unrelated to the price of propane. While the possibility exists that lower propane costs could be achieved through multiple suppliers, the evidence of several witnesses is that they did not even bother to investigate the prices and possible savings; Mr. Stewart of Canadian Tire was one such:

> MR. MILLER: Is the dealing with the one person and the one company across the country, is that of value to you?
> MR. STEWART: Absolutely.
> MR. MILLER: In what sense?
> MR. STEWART: Everything gets funneled through one person. I don't have to chase down the person who is responsible for different areas of the business. I can funnel all my questions through one and it gets distributed from there.
> MR. MILLER: Can you quantify this value in any fashion?
> MR. STEWART: I do not believe so.
> THE CHAIRMAN: I take it that you have never tried? Based on your answer, you've never tried to quantify it?
> MR. STEWART: No, we haven't.
> THE CHAIRMAN: Is that because it doesn't matter?
> MR. STEWART: At the time, it doesn't.
> THE CHAIRMAN: Very well.
> MR. MILLER: In the event of a price increase, how much of a price increase would you sustain before moving to some other arrangement?
> MR. STEWART: Well, it's hard to say at this point in time because it would take a lot of investigative work to ascertain costs and the costs involved with using alternate suppliers.
> MR. MILLER: Have you examined that at all?
> MR. STEWART: No.
> MR. MILLER: Thank you, sir. Those are all my questions.
>
> transcript at 11:1572, 1573 (13 October 1999).

[80] The evidence is that some large propane consumers with multiple sites acquire propane from multiple local suppliers, rather than from a national supplier. These consumers have decided to supply coordination services internally. In the Tribunal's view, it would not be unusual for firms to accomplish their propane supply objectives in different ways. Internal coordination may well be efficient for some firms but not for others. However, the key question is not whether internal coordination is available as an alternative in the event of a small but significant price increase but, rather, whether national account customers would switch to multiple suppliers and internal coordination in that event.

[81] Although no expert witness has provided an opinion that national account coordination services constitute a relevant product market, the Tribunal is satisfied, in the light of the totality of the evidence, that national account coordination services constitute a product over which market power could be exercised.

[82] In light of comments regarding national accounts by both parties, it should be noted that product markets are defined in terms of products alone. For example, does the market for retail propane include natural gas, electricity, wood, etc.? Neither competitors nor customers can be said to be "in" or "out of" a product market. For this reason, the Tribunal defined a product "national account coordination services" and considered whether market power could be exercised over such product.

B. GEOGRAPHIC MARKET

(1) Local Markets

[83] The geographic market dimension of the relevant product is critical in this case because delivery is an important component of the product. Failure to define the proper geographic boundaries of retail propane markets would lead to the incorrect measure of market shares and hence of the ability to exercise post-merger market power. In this case, both parties submit that the geographic market is local in nature rather than provincial, national or international; but the dispute concerns the actual boundaries of these markets. The Commissioner presents a set of geographic markets based on Douglas West's spatial analysis approach which identifies joint service areas. The respondents criticize these markets as being too small when compared with Superior's actual travel patterns.

[84] The geographic boundaries of a market are established by asking what would happen if a hypothetical monopolist at a particular location attempted to impose a small but significant non-transitory price increase. If this price increase would likely cause buyers at that location to switch sufficient quantities of their purchases to products sold at other locations as to render the price increase unprofitable, then the geographic market would be expanded by adding the location to which customers switched their purchases. This question would be asked in relation to the expanded market repeatedly until a set of locations was identified over which a hypothetical monopolist could profitably impose a small but significant and non-transitory price increase. That area would be the smallest area over which market power could be exercised and would constitute the relevant geographic market for competition analysis.

[85] This area may bear little resemblance to service areas or trade areas as defined by particular sellers in the conduct of their business activities. These service or trade areas could be helpful in delineating relevant geographic markets but they do not define areas over which market power can be exercised.

[86] Professor West states that Superior and ICG had approximately 130 and 110 branches and satellite locations respectively in 1997. Professor West's procedure grouped these locations into 74 local geographic markets. In his opinion, these markets are relevant for the purpose of computing market shares and inferring post-merger market power (expert affidavit of D. West (17 August 1999): confidential exhibit CA-2051).

[87] Professor West's methodology, which is set out at pages 21-25 of his report, relies on set theory. First, he plots all branches and satellite locations of all propane dealers in operation in 1997. This accords with the view that the product of this merger is produced at the local storage facility and conforms with the approach that geographic markets should, in general, be delineated based at the point of production rather than at the point of consumption.

[88] For an initial Superior location, Professor West finds the "nearest point set". The boundary between that location and another Superior location is the bisector of a straight line joining them. Bisectors for all adjoining Superior locations will completely specify the "market polygon" for that initial location. Similarly, Professor West determines the market polygon for each ICG location.

[89] Then, starting with a Superior location, Professor West assumes that the market polygon is part of the relevant market served by the branch at that location. If that polygon contains an ICG branch, then the Superior branch's market polygon is expanded to include the ICG branch's polygon. In essence, the market is defined as the union of the two polygons. If that ICG polygon includes a Superior branch/satellite location, the market is expanded again to include the union of the three polygons. The market is expanded in this way until no further polygons can be added to the union; at that point, Professor West defines a "candidate local market". He then undertakes the analysis for another Superior location.

[90] For each candidate local market, Professor West defines a buffer zone of 100 kilometers around the perimeter. He identifies all propane dealers with locations in that zone and considers, based on available information, whether those dealers can, in the event of a post-merger price increase, sell propane to customers located in the candidate market. Branches in the buffer that can compete with locations in the candidate market are included in the market for measuring market shares.

[91] Professor West notes that, in densely populated areas with many competing dealers, markets may be difficult to distinguish, particularly where branches of Superior or ICG are found in the buffer zone of a candidate local market. Such markets may be "linked". Accordingly, Professor West combines linked markets and re-estimates the market shares and reports that his market share estimates are not significantly altered in these larger markets.

[92] Professor West notes at page 3 of his report that:

> I have concluded that retail propane markets are local in geographic scope. They generally extend around 60 to100 kms. from the locations of SPI/ICG branches and satellites, depending on specific local market characteristics.

[93] The Commissioner further submits that Superior's own documents support Professor West's conclusion that the geographic market spans from 60 to 100 kilometers, as a general matter.

[94] With respect to the economical delivery distance, the 1997 Superior Propane Income Fund Annual Report (exhibit A-712) reads at page 07699:

> . . . The further propane is transported, the higher the delivered cost, therefore, the competitive operating area is limited to a reasonable radius of 70 to 80 kilometres around the branch or satellite locations. (emphasis added)

[95] The 1998 Superior Propane Income Fund Annual Report (exhibit R-111, tab 1) reads at page 01189:

> . . . The further propane is transported, the higher the delivered cost. Therefore, the competitive operating area is generally limited to a radius of *100 to 400* kilometres around branch or satellite locations. (emphasis added).

[96] The Commissioner also notes that, subsequent to the 1998 Superior annual report, the respondents took the position in their response to the Commissioner's application that Superior's appropriate delivery range is 50 to 300 kilometers.

[97] The respondents dispute that the relevant geographic market is 60 to 100 kilometers radius around Superior-ICG branches and satellites. They submit that Superior's trading areas have radii of 50 to 620 kilometers and that some competitors have even larger trading areas which contradict Professor West's conclusion that competition between propane distributors is limited to firms within a range of 60 to 100 kilometers of a given branch or satellite.

[98] The respondents also submit that Professor West's model has never been used for this type of competition analysis and he has not determined whether his geographic markets "function as markets".

[99] Mark Schweitzer, Superior's Chief Executive Officer, indicated that Superior's branches have been reorganized. For example, he testified that 10 branches have been closed, but most have been converted to satellite locations (transcript at 31: 5911, 5912 (3 December 1999)) so that other branches may serve now larger areas with a radius of 100 to 400 kilometers as stated in the 1998 Superior Propane Income Fund Annual Report (exhibit R-111, tab 1).

[100] The Tribunal is of the opinion that Professor West's analysis, while it does not follow the hypothetical monopolist approach entirely, nevertheless is similar in certain respects to that approach and can be used to identify relevant geographic markets (transcript at 22:3914 (29 October 1999)). Moreover, the respondents have not demonstrated that Professor West's spatial methodology was flawed in any significant respects. The respondents noted that the computer algorithm produced certain anomalies which led certain market boundaries to extend to the Arctic Ocean, but these criticisms were not crucial to the value of Professor West's approach since these are functions of the computer mapping procedure. In addition, the respondents dispute some of his market share calculations.

[101] As to the argument of the respondents that Professor West's markets may not function as markets, the Tribunal is of the view that there is no necessary correspondence between a competition market, which is an analytical construct, and a market defined by management for operational purposes.

[102] Further, the Tribunal notes that the respondents did not present an alternate set of geographic markets for the purpose of competition analysis. Rather, they seemed to suggest that the business-service areas of their branches and satellites were appropriate for this purpose.

[103] The Tribunal notes that Mr. Schweitzer testified that he knew of no branch which could provide service to customers only as far as 60 kilometers or under 90 kilometers, which contradicts Superior's own evidence in some of the 1998 branch templates (e.g., Calgary 50 kilometers). Further, the Tribunal does not find the explanation of Mr. Schweitzer convincing because many of the branches were converted into satellite locations. Therefore, the Tribunal does not understand why converting branches to satellites would modify the boundaries of a geographic market.

[104] The Tribunal notes that there is no evidence that using the furthest distance travelled from a branch constitutes a valid method for defining a relevant geographic market. Further, even if referring to the furthest point of a trading area were appropriate for defining such a market, the Tribunal would be concerned about adopting a method that would be based on the delivery to the exceptional customer located at great distance rather than considering the typical distance travelled for the majority of customers. There is no evidence that a Superior branch whose furthest customer is located 620 kilometers away serves all customers within that distance. Therefore, even if the Tribunal accepted in principle that a branch trading area could be a competition market, it could still not conclude that this trading area would have a radius of 620 kilometers.

[105] The respondents submit that some independent firms serve customers in many of Superior's trading areas and that their travel distances are longer because they have fewer branches. However, it is not clear that such firms serve the entire Superior branch trading area. In addition, serving adjacent Superior trading areas does not necessarily mean that these independent firms deliver propane over longer distances than Superior does. Also, if the respondents were correct in their submissions, it would remain unclear whether these independent firms supply many customers at longer distances; that is, their trading areas may not be measured by the longest distance travelled.

[106] As stated above, the Tribunal does not agree that areas over which market power can be exercised are necessarily coincident with existing business or service areas such as those of Superior. Accordingly, the Tribunal concludes that the "candidate local markets" produced by Professor West's methodology are reasonable and appropriate for the purpose of identifying the relevant geographic markets in order to determine whether the merged entity will have the ability to exercise market power.

(2) National Accounts

[107] With respect to the geographic market relevant for national accounts, the Commissioner submits that the relevant geographic market for the analysis of the national accounts is Canada. The respondents do not address the relevant geographic dimension for national accounts.

IV. <u>SUBSTANTIAL PREVENTION OR LESSENING OF COMPETITION</u>

[108] The Commissioner submits that there will be a likely substantial lessening of competition in many local retail propane markets, a likely substantial lessening of competition regarding national accounts and a likely prevention of competition in Atlantic Canada. The Commissioner also argues that there will be a likely substantial lessening of competition by virtue of the creation or enhancement of market power by the merged entity which he attempted to demonstrate with expert and factual witnesses. He argues that market power can be inferred from various factors such as high market shares and concentration, the high barriers to entry, the removal of ICG as a vigorous competitor, the lack of foreign competition and the fact that there is no effective remaining competition.

[109] The respondents submit that the merger is not likely to result in a substantial lessening of competition. They argue that the terms "likelihood of a substantial lessening of competition" are synonymous with "likely price increase" and that the Commissioner failed to demonstrate a likely post-merger price increase. They dispute the Commissioner's definitions of geographic and product markets, rely on the growth of independents' market share, advocate that ICG is not a vigorous and effective competitor and that barriers to entry in the retail propane business are low.

A. MARKET SHARES AND CONCENTRATION

[110] The Commissioner's expert witness, Professor West, studied the combined market shares of Superior and ICG in 74 local markets for 1997 as stated above. He concludes at page 29 of his report (confidential exhibit CA-2051) that in 17 such markets, the combined market share is between 95 and 100 percent, that 32 markets have combined market shares in excess of 80 percent, that 46 markets have combined market shares of 70 percent, and that 66 markets have combined market shares in excess of 60 percent. In order to get these results, Professor West relies upon a set of completed surveys for the year 1997 that the Commissioner has received from responding propane dealers (the competitor survey) as well as, *inter alia*, internal business plans and data regarding sales volume and market shares of Superior and ICG. Professor West states that he has relied on Superior's data in the absence of sufficient data provided from competitors.

[111] The respondents criticize Professor West's market share estimates on the grounds that he uses volume information for 1997 and Superior and ICG branch locations for 1998. The Commissioner points out, however, that Professor West does not mix 1998 locations with 1997 volumes and further refers to page 21 of his report to demonstrate that he identifies all of Superior's, ICG's, and other propane dealers' satellite and branch locations in operation in 1997.

[112] Further, the respondents suggested to Professor West during cross-examination that he should have done a "reality check" by aggregating the volumes consumed in his 74 local candidate markets in 1997 with other measures of total consumption for that year. In final argument, they state that there were 200 competitors, only 67 of whom responded to the 1997 competitor survey. They also state that the 1998 volumes of the approximately 140 non-responding competitors would likely be a good estimate of those firms' volumes in 1997 and should have been used. The Commissioner points out that the competitor survey identified and sought responses from 118 competitors and that the figure of 200 is an internal estimate of Superior that includes agents of Superior and of ICG that Professor West specifically tried to eliminate. Moreover, the Tribunal heard evidence that 1998 volumes declined from 1997 levels due to warmer weather; thus, there would be no reason to assume that the volumes of the non-responding firms would have remained the same in 1998.

[113] The respondents also criticize Professor West's estimates because the total of the 1997 volumes by market differs from the Statistics Canada data on total retail propane demand. During Professor

West's cross-examination, the respondents pointed out that the aggregate volume calculated from Professor West's individual market analysis differed from the aggregate number provided by Statistics Canada, as cited by the Commissioner's expert witness, Mr. Mathieson. However, the Commissioner pointed out that the 74 markets identified by Professor West did not cover the entire country. For example, they did not include a large part of the Maritimes, Northern Manitoba or the Territories. In addition, Mr. Mathieson noted that errors in the Statistics Canada data meant that it should only be used to establish trends in propane demand rather than accurate annual estimates of consumption by end-use.

[114] The respondents' experts, Dennis W. Carlton and Gustavo E. Bamberger, criticize Professor West's 1997 market share estimates as being less reliable than information provided to them by Superior. Professor West replies that Superior's share estimates contained in its 1998 branch templates are based on an internal survey prepared after the commencement of the proceedings and conducted by branch managers who have no actual sales volume information for independents for that year (expert affidavit in reply of D. West (20 September 1999): confidential exhibit CA-2052 at 2).

[115] The respondents argue that Professor West does not allocate all of the various independents' volume of propane sold in the relevant geographic markets, as defined by him, and that the allocation is arbitrary. Professor West explained that he used Superior's own market share evaluation when he did not have the sales volume information from other independent competitors (transcript at 22:3931 (29 October 1999)) and that he reduced Superior and ICG's combined market share in some of the geographic markets by several percentage points to reflect the sales volumes of several small competitors for which he did not have specific volume information. The Commissioner states that if Professor West did not have adequate volume data to calculate market share, he did not attempt to invent one in order to allocate some volumes to the market.

[116] Professor West's results, set out at page 29 of his report (confidential exhibit CA-2051), are very similar to a frequency distribution of Superior/ICG market shares that Superior has estimated, apparently based on its branch trading areas. For example, Superior's own analysis indicates that 15 out of 116 branches have a market share of between 95 and 100 percent. Although the methodology of the two studies differ, this result is common to both and gives the Tribunal further confidence in Professor West's analysis.

[117] In addition, the Tribunal has reviewed the criticisms made by the respondents on a market by market basis of Professor West's market share estimates. After careful review of his explanations and methodology (and having examined certain markets in detail), the Tribunal accepts that Professor West's approach is appropriate for a competition analysis in this case and that his inferences and conclusions about market shares are reasonable given the available data and the limitations therein identified by him. The Tribunal is of the opinion that it can rely on these results and conclusions for the purpose of determining whether the merger will result in a likely substantial prevention or lessening of competition.

[118] The Commissioner's experts, Professors Schwindt and Globerman, classify markets on the basis of post-merger market share in their expert report (exhibit A-2056 at 27-41). Using Professor West's relevant geographic markets and market share estimates, they identified 16 local markets in which the merged entity would have combined market shares of 95 percent and higher, which they referred to as "merger to monopoly" markets. At page 28 of their report, they indicate that the merger will substantially increase the probability of a unilateral price increase in these markets.

[119] They further identify eight markets ("category 1"), in which the Superior or ICG pre-merger market share is relatively small. In these markets, the merger may have minimal impacts on competition between Superior and fringe competitors and, therefore, the main concern is the removal of ICG as a potential future competitor *(ibid. at 37)*. In addition, the merger in these markets would eliminate competition for propane buyers who prefer to deal with one of the major companies.

[120] A third set of markets ("category 3") identifies 16 markets in which ICG has a substantial market share prior to the merger but where there are at least three competitors including Superior and ICG. In these markets, Professors Schwindt and Globerman expect that the elimination of ICG is likely to enhance interdependence and reduce competition (*ibid.* at 38, 40).

[121] The final set of markets ("category 2") includes 33 local markets in which a relatively fragmented fringe of firms compete against Superior and ICG and where the merging parties are the two largest sellers *(ibid. at 40)*. They state that there is a substantial likelihood that the merger will significantly reduce competition in these markets by creating a dominant firm and enhancing interdependence.

[122] The respondents criticize Professors Schwindt and Globerman's analysis of the anti-competitive effects of the merger. First, they submit that Professors Schwindt and Globerman provide no opinion regarding the likelihood of a price increase in any market. Secondly, they submit that even Professors Schwindt and Globerman have minimal concerns about the anti-competitive effects of the merger in their category 1 and 2 markets. Thirdly, they argue that existing competitors will continue to compete vigorously in category 3 markets. Finally, they indicate that entry will restrain the merged entity from imposing a unilateral price increase in merger to monopoly markets.

[123] Further, the respondents' experts, Professor Carlton and Dr. Bamberger, state at page 4 of their report that Professors Schwindt and Globerman accept that the substantial presence of independent retailers can constrain the merged firm from raising retail propane prices (expert affidavit in reply of D.W. Carlton and G.E. Bamberger (14 September 1999): confidential exhibit CR-121). In the Tribunal's view, this is not an accurate characterization of Professors Schwindt and Globerman's opinion.

[124] The Tribunal believes that the respondents have incompletely depicted the opinion evidence of Professors Schwindt and Globerman and it accepts that, although they have not provided a firm opinion on the likelihood or quantum of a price increase, their conclusions regarding the anti-competitive effects of the merger are important and significant for the purpose of determining the likelihood of a substantial lessening of competition. The Tribunal will discuss the entry argument below under the heading "Evidence on Entry".

[125] A key issue in this case is the evaluation of the post-acquisition market share of the merged entity by market. The respondents argue strenuously that the post-merger market share on a national basis has been declining and may have reached between 50 and 60 percent in 1998. These national market shares were introduced to establish the significant growth of independent propane marketers over the period between 1990 to 1998. The Tribunal believes that since relevant geographic markets are local, evidence of high market shares on a local basis cannot be defeated by a trend of national market shares purporting to demonstrate that entry can overcome this substantial lessening of competition.

[126] Information on high market shares is, therefore, relevant but not determinative in respect of a finding of a likely substantial prevention or lessening of competition. However, the Tribunal notes that these market shares must be measured with respect to relevant product and geographic markets. In this case, since no national product market for retail propane has been demonstrated, information on market shares for Canada as a whole are not informative as to the exercise of market power in local markets.

B. BARRIERS TO ENTRY

[127] As stated by the Tribunal in *Director of Investigation and Research v. Hillsdown Holdings (Canada) Limited* (1992), 41 C.P.R. (3d) 289 at 324, [1992] C.C.T.D. No. 4 (QL):

> In the absence of significant entry barriers it is unlikely that a merged firm, regardless of market share or concentration, could maintain supra-competitive pricing for any length of time. An attempt to do so would cause competitors to enter the market and the additional supplies created in that manner would drive prices back to the competitive level.

[128] This statement emphasises the economic effect of entry. Evidence of commencement of operations, per se, is insufficient to establish the competitive restraint on a supra-competitive price or a likely exercise of market power. Moreover, if the impact on price is delayed beyond a reasonable period, then entry for the purpose of the Act has not occurred even if new businesses have started their operations. The appropriate length of time for judging the impact of entry is a matter of opinion; however, the Tribunal notes that the MEG's, cited above at paragraph [57], refer to a period of two years.

[129] The Commissioner submits that there are high barriers to entry into the propane distribution business. The barriers include the nature and existence of customer contracts and tank ownership, switching costs, minimal required scale, reputation, maturity of the market, the competitive response to entry (including litigation threats), access to propane supply, capital requirements, sunk costs and the time to get the business profitable.

[130] The respondents dispute the existence and/or significance of these barriers mainly on the basis of their evidence of alleged entry and expansion by independent retail propane marketers.

(1) Contracts

[131] The Commissioner's expert, Michael D. Whinston, conducted an analysis of the customer contracts used by Superior and ICG and the likely competitive effects arising from the merger (expert affidavit of M.D. Whinston (18 August 1999): exhibit A-2063). Professor Whinston reviewed the standard form contracts offered by Superior and ICG and found several provisions that could limit entry and/or expansion. These provisions include long-term exclusivity, automatic renewal, termination fees, right of first refusal (Superior only), and tank ownership.

(a) Contract Duration and Exclusivity

[132] It is not disputed that a high percentage of propane customers take delivery under contracts. For example, Superior has estimated that 90 to 95 percent of its customers are under standard form contracts with the remaining 5 to 10 percent under negotiated non-standard contracts (confidential exhibit CA-701 at 06976). The Commissioner’s expert, Professor Whinston, provides the same number with respect to ICG. According to Mr. Schweitzer, 70 percent of Superior’s propane customers are under five-year term contracts: "Well, our standard that we discussed earlier today has a five-year term in it. My understanding is that about 70 percent of our customers have standard contracts" (transcript at 31:5894 (3 December 1999)).

[133] Professor Whinston notes that long-term exclusive contracts can have both efficiency-enhancing and anti-competitive effects. In the case of propane supply contracts, the term can be as long as five years. This duration limits customer switching and can lead the supplier to offer less competitive prices than it would absent the exclusivity provision. Although sophisticated consumers will take into account the impact of exclusivity and will insist on compensation for the lack of choice for the term of the contract, Professor Whinston suggests that most residential customers may not understand the limitation of choice and the impact of loss of competition for their custom.

[134] Professor Whinston is more concerned about the entry-deterring effect of long-term exclusive contracts for propane supply. Noting that economies of scale appear to characterize the propane delivery business, he suggests that a new entrant will have to acquire enough customers to achieve the minimum efficient scale of operation, failing which the entrant will operate at a cost disadvantage compared to incumbents. In light of the exclusive nature of propane contracts, a new entrant will seek to acquire customers whose contracts with incumbents are expiring, but the long terms may limit the number of such "free customers" in any year to a level at which new entry is not profitable. He notes that this problem will be more severe when the contract expiration dates are staggered and when the contract terms are longer.

[135] Similar concerns will be raised for existing smaller firms that seek to invest in order to lower operating costs, expand capacity or improve quality. The "free customer" base may not justify such investment.

[136] Professor Whinston adopts the observation made by the Commissioner’s expert, Terry Kemp, that the minimum efficient scale for a propane marketer is three million litres per year in order to demonstrate, in a general way, the impact of long-term exclusivity on the profitability of entry and expansion. If the average duration of contracts in a market is four years, then 25 percent of the contracted volume can be expected to come off-contract every year. If one new entrant could attract all of these free litres, then the market would require 12 million litres of total annual consumption in order for that new entrant to enter at the minimum efficient scale. Professor Whinston finds for example that the total consumption in 12 of 71 markets defined by Professor West is less than 12 million litres and concludes that entry will be difficult in these circumstances.

[137] The respondents submit that contract exclusivity is not a significant barrier to entry in this merger because only five markets will have less than 2.25 million litres required to support one new entrant. However, this result flows from assumptions that Professor Whinston regards as unrealistic.

[138] Professor Whinston recalculates the number of markets with minimum required volumes assuming that declining autopropane volumes will not be available to a new entrant in any markets as defined by Professor West, that the minimum efficient scale is six million litres per year and that all customers are on four-year contracts. On this basis, he finds that 37 out of 73 "West markets" will not be large enough to sustain one new entrant, even if right of first refusal clause and other contractual terms are not effective deterrents to switching.

[139] The Tribunal is of the view that the respondents' submission does not represent Professor Whinston's opinion. According to Professor Whinston's estimates, entry and expansion at minimum efficient scale are unlikely in many West markets.

(b) Automatic Renewal

[140] With respect to automatic renewal, Professor Whinston notes that the automatic renewal feature of propane customer contracts serves to increase the effective duration of these contracts, as the notice periods are long. For example, ICG's Fuel Supply and Equipment Agreement requires the customer to give notice of termination of 180 days, absent which the contract will be renewed at expiry for the original term of perhaps five years. Thus, in the event that a new entrant is successful in attracting an ICG customer under this contract, it would have to wait six months before commencing service.

(c) Right of First Refusal

[141] The right of first refusal clause in Superior's contracts also deters entry in Professor Whinston's opinion. Under this provision, Superior has the right to match the price offered by a competing supplier and the customer is required to provide the name of the competitor and its price. The result is that Superior is fully informed of the identity of any rival who is bidding for its customers and is better able to retaliate against it selectively.

[142] The right of first refusal clause greatly reduces the profitability of entry by new firms and expansion by existing firms. Since Superior can retain its customer by matching the new entrant's lower price (i.e., even if the entrant offers better quality service), a rival will have to offer a price that is below Superior's cost to make the offer unprofitable to Superior. Therefore, a rival with higher costs and quality may find a customer interested in switching but it cannot lower its price enough to avoid "matching" by Superior.

[143] The respondents do not challenge Professor Whinston's opinion on this point. Accordingly, the Tribunal accepts Professor Whinston's opinion that right of first refusal clauses reduce the profitability of entry and expansion.

(d) Tank Ownership

[144] Professor Whinston draws attention to the provisions in Superior and ICG contracts under which they retain ownership of the propane storage tank at the customers' site. This is a feature of all contracts except for Superior's Industrial Agreement to industrial customers and it is a feature of contracts offered by virtually all propane marketers. He concludes that the practice of not selling tanks greatly increases the costs of a customer switching to another supplier. The tank rental requirement makes the customer much less likely to switch than if the tank were owned. Professor Whinston concludes that the rental requirement effectively increases the duration of the long-term exclusive contracts and further reduces the likelihood of new entry or expansion.

[145] Based on the evidence on the record, it appears that switching to an alternate propane supplier typically results in direct and indirect costs. The direct costs would include a restocking cost calculated by Superior at 15 percent of the total value of propane in the tank being removed. Indirect costs to switching include important delays between the time the existing supplier removes its tank and the time when the new supplier installs its equipment. Commercial, industrial, or agricultural customers may have to reduce or stop operations during this period. Residential customers will generally be unwilling to risk the loss of heating, particularly in winter months.

[146] The respondents submit that tank ownership by the marketer ensures proper tank inspection, maintenance and safety practices. They also allege that since independents are growing at the expense of Superior and ICG, tank ownership does not constrain independent entry or expansion.

[147] The Tribunal notes that there is no evidence that tank inspection, maintenance and safety practices have to be tied to tank ownership. Such services could be provided to a customer that owned the tank. Therefore, the Tribunal is of the view that tank ownership by the propane supplier makes customer switching more difficult and costly, and it accepts that it constitutes a barrier to entry and expansion. As to the alleged entry and growth of independents, the Tribunal will discuss that point below.

(e) Voluntary Undertakings

[148] Finally, Professor Whinston notes that Superior has indicated that if the merger is approved it will not enforce term provisions in its existing standard contracts for propane supply, that it will adopt 30-day notice periods in standard form customer agreements, that it will waive liquidated damages terms, and that it will waive right of first refusal provisions. He believes that these voluntary undertakings do not adequately address his concerns about the competition-reducing effects of Superior's and ICG's customer contracts. For example, he notes at paragraphs 97 to 104 of his report (exhibit A-2063) that Superior has not committed to actually advising its customers of these changes.

[149] The respondents submit that Superior and ICG do not enforce the provisions of their standard form contracts. Further, the respondents submit that only a few letters have been sent to customers and competitors in the last seven years addressing Superior's and ICG's legal rights but that neither Superior nor ICG has commenced litigation in regard to the matters raised in these letters.

(f) Conclusion on Contracts

[150] The Tribunal accepts that the provisions in the contracts, including long-term exclusivity, automatic renewal, termination fees, right of first refusal (Superior only), and tank ownership significantly raise the cost of entry and expansion and hence constitute a barrier to entry.

(2) Competitive Response to Entry

[151] An important component in the decision to enter the market is the assessment of the likelihood of a competitive response from the incumbents in the marketplace. The Commissioner introduced evidence in support of his argument that retaliation constitutes a response to competitors who have taken business away from Superior. This competitive response is generally in the form of intense price competition targeted at the entrant in order to affect its ability to compete in the market.

[152] The experience of Imperial Oil Limited ("IOL") demonstrates that even very large and sophisticated companies may not be able to enter the propane distribution business profitably. In 1990, IOL, the largest propane producer in Canada (following the Texaco merger), sought to expand its activities into propane distribution. The project manager, Meredith Milne, testified that IOL experienced a vigorous response from competitors following its attempt to enter the propane market. It found that margins were 30 percent lower than planned and 45 percent lower than in 1991. IOL found that incumbent marketers started to charge customers switching to IOL for tank removal and that they removed the tank rental charges.

[153] In addition to the competitive price response, IOL also found that it was difficult to get customers to switch due to the multi-year contracts and the "last look on tenders" available to incumbents. These were all elements that either increased IOL's costs or made it difficult to gain new accounts with the result that IOL exited the market (transcript at 13:1976 (15 October 1999)). Based on the evidence, the Tribunal notes that no other entry by companies of similar size or stature has occurred in this industry.

(3) Reputation

[154] The lack of a reputation for reliable supply and service can be an entry barrier. Reputation may be a crucial element in gaining customers, especially when services are an important element of the product.

[155] The Commissioner submitted evidence that reputation constitutes a barrier to entry in the propane supply and delivery market. In addition, the Commissioner's expert, Professor Globerman, stated that the incumbents had reputational advantages, which means that the entrant is likely to take longer to establish that critical mass in demand. The Canadian Market Research Study commissioned by Superior in October 1997 (confidential exhibit CA-1485) reads at page 17416:

> . . . commercial and residential markets display a significant lack of awareness and familiarity with alternative suppliers.

Further, at page 17437:

> Currently, four in ten (39%) Superior [commercial] customers are not aware of an alternative propane supplier on an unaided basis . . . . ICG is the most formidable competitor in Ontario and Quebec . . . . 64% of competitor customers have unaided awareness of the Superior brand and 29% designate it as the alternative supplier with which they are most familiar.

And at page 17527:

> Residential propane users also exhibit a fundamental lack of awareness and familiarity with the range of alternative suppliers (more pronounced than the commercial market) . . . .
>
> In the shot [sic] term, competitive threats may be limited. Currently 58% of Superior customers are not aware of an alternative propane supplier on an unaided basis, and 74% say they are not familiar with an alternative.

[156] The respondents submit that the existence of a "proven track record", as in the case of Superior and ICG, is not an impediment to competition; rather, it is the natural result of competition.

[157] Loyalty is a related consideration. The Commissioner presented witnesses from cooperatives and credit union organizations whose sellers offer propane and give dividends to member customers based on such purchases. These customers have an incentive to continue to be loyal to their propane supplier. Based on the evidence submitted by factual witnesses, the Tribunal accepts that reputation is an important feature of propane suppliers to which customers attach value. It appears that this is particularly true for major account customers whose factual witnesses testified that the reputation of the companies capable of delivering propane is an important factor in their purchasing decision. The Tribunal notes that the time to gain a reputation may make profitable entry more difficult and hence delays the competitive impact that an entrant would have in the marketplace.

(4) Maturity of Market

[158] The Commissioner called witnesses who testified that the market was mature and that the demand was flat (see testimony of John A. Osland from Mutual Propane, transcript at 6:833 (4 October 1999) and testimony of Luc Sicotte from Gaz Métropolitain, transcript at 18:3148 (25 October 1999)). Mr. Schweitzer testified that it was a relatively mature market (transcript at 31:5920 (3 December 1999)).

[159] The Commissioner's experts, Professors Schwindt and Globerman, testified on the competitive impact of this mature market at page 48 of their report (exhibit A-2056):

> . . . the industry is mature and has experienced slowly declining demand in recent years. As noted in the *Merger Enforcement Guidelines*, entry into start-up and growth markets is less difficult and time consuming than it is in relation to mature market.

[160] In light of the evidence submitted, the Tribunal is satisfied that the traditional retail propane market place can be qualified as mature.

(5) Access to Propane Supply

[161] The Commissioner refers to the opinion of many competitors that the ability to access propane supply is a "critical barrier to entry/expansion". Evidence in this regard consists of the disadvantages that independent firms face in obtaining supply that Superior and ICG do not face. For example, the respondents have established supply relationships and have invested in storage and transportation facilities that provide cost advantages over rivals who may be restricted to local pick-up from refinery racks. These arrangements are apparently valuable for serving branches particularly distant from refinery sites. Superior and ICG also have "scale demand" for propane which gives them an edge over traditional patterns of supply.

[162] One of the Commissioner's experts, Terry S. Kemp, observes at pages 15 and 16 of his report (expert affidavit of T.S. Kemp (18 August 1999): exhibit A-2070) that:

> Sup-ICG with the exception of a few selective refineries will have access to supply at virtually every producing location in the country. Sup-ICG will thus have an implied supply advantage and flexibility that cannot be matched by any other retail propane competitor.
>
> Sup-ICG should be able to selectively choose the most advantageous supply locations and drop others, thereby extracting the most out of supply arrangements. Sup-ICG will also be in a position to leverage supply from location to location for trades and exchanges and, will in essence, be able to create preferential access to supply and location adjustments. These advantages can be utilized in a number of ways:
>
> - Pressuring supplier price location arrangements
> - Using competitive advantages when bidding on new contracts
> - Servicing National accounts
> - Negotiating more favourable bulk transportation rates (volume discounts) with trucking and rail companies.

[163] The Commissioner's expert, Mr. Mathieson, notes that the respondents have access to supply at prices more favourable than simply the posted or rack price.

Mr. Kemp pointed out that propane producers generally prefer to supply those who have the ability to lift product on a regular basis. A new entrant would not be able to immediately demonstrate this ability and would be at a disadvantage to the respondents. The Commissioner's witness, Peter Renton of Gulf Midstream Services Ltd., confirmed that his company prefers customers who perform very well over those customers who fail to take a significant portion of their product each year and to whom sales would be reduced and rack prices charged.

[164] The Commissioner cites the Ontario Region 5 Year Strategic Plan from Superior (confidential exhibit CA-299) that indicates Superior's view that it creates barriers by "tying-up supply", specifically its ten-year supply arrangement with Shell. The respondents point out that the independent marketer, AutoGas, has a ten-year arrangement with IOL.

[165] Mr. Kemp observes at page 15 of his report (exhibit A-2070) that Superior's propane cavern storage allows it to purchase spot volumes at low prices and Mr. Mathieson is concerned that Superior's supply transportation costs are the lowest in the industry.

[166] The testimony indicates that in periods of tight demand, producers ration their supplies and give preference to their largest customers, causing some independents to deal with brokers. However, no independent testified that it could not obtain propane. The expert opinion evidence states that the merged entity will have advantages in acquiring propane that smaller competitors will not enjoy. The Tribunal accepts that new entrants and small firms seeking to expand bear the costs of investing in reputation with propane suppliers that incumbents do not have to bear and, to that extent, they face entry barriers. However, these costs are not a result of the merger and are not increased by it. Other advantages that reduce the cost of propane acquisition (such as buying at low "off season" prices and storing) to the respondents and the merged entity reflect efficiencies and do not create barriers to propane acquisition. The Tribunal does not agree that the new entrants and expanding firms face significant barriers to obtaining propane supply.

(6) Capital Requirements/Sunk Costs and Time to Get Business Profitable

(a) Scale of Entry or Expansion

[167] Several of the Commissioner's witnesses (Professors Globerman and Schwindt, Messrs. Kemp and Mathieson) note in their expert reports that entry into the propane business is costly. Mr. Kemp, for example, suggests at page 7 of his report (exhibit A-2070) that the capital costs for a start up greenfield retail propane operation are in the range of $675,000 to $920,000 to support initial sales of two million litres per year which he regards as minimally-required for success. He estimates operating costs, at page 9 of his report, at approximately $300,000 per year. Several fact witnesses mentioned the high costs involved in obtaining storage tanks, transport and delivery trucks and customer tanks, particularly when certain customers have requirements for on-site storage.

[168] The respondents have submitted in their amended response that one can enter the propane distribution business for a total investment of $120,000 to $300,000. The Commissioner submits that even if entry of that scale is possible in certain geographic locations, the respondents have understated the costs for the most part. According to the Commissioner, such a small entrant would be an uncommitted entrant, unable to constrain Superior/ICG's market power.

[169] The Commissioner argues therefrom that high capital costs are themselves a barrier to entry, ostensibly on the basis that few people had the required financial resources to enter the industry. Competitors in the industry testified to the effect that costs of entry may vary.

It cost Donald J. Edwards $935,000 to construct EDPRO Energy Group Inc.'s facility in London, Ontario, excluding the purchase of tanks for customer use (transcript at 6:1072, 1073 (6 October 1999)). Evidence was also submitted indicating that costs associated with meaningful entry might vary upon the end-use served.

[170] The Tribunal does not accept that high capital costs are inherently a barrier to entry. If a potential entrant's equity is insufficient to cover capital costs of entry at minimum efficient scale, then the balance can be obtained through credit markets providing that lenders are satisfied that the project is viable. In the event that lenders deny credit because of their assessment of the project, their reluctance to lend does not indicate that capital is not available. In response to a question from the Tribunal, Professor Schwindt stated that high costs, per se, did not constitute an entry barrier.

[171] On this latter point, the Commissioner accepts that high capital costs are not, in absolute dollars, an issue relevant to entry; rather, the relevant costs to be considered are the sunk costs because they represent what the entrant will lose in the event of failure.

(b) Sunk Costs

[172] It is generally agreed that the portion of costs that are not recoverable in the event of exit (the sunk costs) can, where they are significant, constitute a barrier to entry. The Commissioner suggests that the retail propane market is characterized by significant sunk costs. There is a dispute between the Commissioner and the respondents as to the proportion of the costs that can be qualified as sunk costs. The extent of these costs depends on a variety of factors.

[173] In the propane industry, the sunk costs would include the market development costs, site-preparation costs, and the discounts to purchase price that would be incurred on asset disposals. Mr. Milne of IOL estimated that 50 percent of its costs were non-recoverable when IOL entered the Camrose market. Mr. Katz from AmeriGas indicated that 30 to 80 percent of investment in propane operations would be non-recoverable. As well, salaries and other operating costs incurred to the date of exit would also be non-recoverable. The respondents' experts, Cole Valuation Partners Limited and A.T. Kearney (expert affidavit of C. O'Leary and E. Fergin (17 August 1999): confidential exhibit CR-112), recognize at page 202 of their report that certain costs are sunk. For example, they assume decommissioning costs of $50,000 per site for locations to be closed, which costs would be non-recoverable.

[174] The Commissioner's experts, Professors Schwindt and Globerman, emphasize the sunk cost of time required for a new entrant to develop a reputation for reliability, as well as for obtaining the necessary permits to install storage capacity. They also characterize at page 49 of their report (exhibit A-2056) as sunk the cost penalty of operating below minimum efficient scale.

[175] The Tribunal is satisfied that sunk costs are meaningful in the industry and constitute a significant obstacle to a new entrant.

(7) Evidence on Entry

[176] The respondents seek to demonstrate that barriers to entry are low by presenting evidence on actual entry over time by independent firms. The respondents have chosen to rely, for the most part, on evidence of growing market shares of independent firms rather than presenting evidence contrary to each of the Commissioner's submissions regarding barriers to entry.

[177] The Commissioner submits that barriers to entry are high and that small scale entry is not an unusual event, but that entry occurs at a relatively low scale and expansion of entrants appears to be both modest and slow. Professors Schwindt and Globerman submit at page 53 of their report (exhibit A-2056) that small scale entry has occurred in the marketplace and that there is considerable turnover or "churn" among small scale entrants. They cite the membership list of the Propane Gas Association of Canada and state that there were 41 new memberships from 1994 to May 1999. They also find that 22 of those members had left the association by mid-1999. Further evidence from Superior also suggests that both entry and exit by small firms are high. Superior indicates that 45 new firms have entered the market since 1996. However, there is only one example of large scale entry, which is IOL's entry into the agricultural, commercial, industrial and automotive segment in western Canada. As noted above, this attempted entry failed.

(a) Basic Trend (1988-98)

[178] The respondents submit that there have been 45 new entrants across the country in the past three years, that there is no evidence of business failure, and that ICG's volume has declined by 26 percent due to its inefficiency over a period of eight years when the national demand for propane increased and independent volume doubled. The respondents further assert, on the basis of Superior's best estimates, that independents have increased their share of retail propane sales from 17 percent in 1989 to 42 percent in 1998 (exhibit R-111, tab 5). They also submit that independents have grown from 24 percent in 1990 to 46 percent in 1998 based on Statistics Canada data.

[179] At the hearing, the respondents introduced numerous calculations of Superior/ICG's combined market share, including a chart handed up in final argument ("Comparison of SPI Estimates Over Time with Statistics Canada Estimates Over Time") comparing Superior's internal market share estimates to market share estimates based on Statistics Canada data from 1988 to 1998. This chart demonstrates that Superior and ICG had a combined market share of 81 percent in 1988. This estimate arises from the market share estimates reported in the Minutes of Norcen Energy Resources Limited Board of Directors meeting on October 11, 1988 (exhibit R-88), in which Superior estimated its market share to be 41 percent, ICG to be 33.1 percent and Premier Propane Inc. ("Premier") to be 6.6 percent. The respondents submit that the Superior/ICG's combined market share was down to 60 percent in 1998 on the basis of market share estimates contained in the 1998 branch templates (exhibit R-111, tab 2).

[180] In response to this chart, the Commissioner points out that the 1988 share of 81 percent includes the volumes of Premier despite the fact that Superior did not acquire Premier until 1993. It is not clear to the Tribunal why Premier's volume was included in the respondents' 1988 combined market share estimate as that volume could not have contributed to the market power of a combined Superior and ICG in that year. Excluding that volume would indicate a 1988 combined Superior and ICG volume of approximately 74 percent.

[181] With regard to the 1998 estimate of 60 percent, the Commissioner submits that this estimate is not accurate. The Commissioner notes that in order to get to this estimate, the respondents calculated the total volume of each branch trading area using the Superior branch manager's estimate of Superior's market share in that area and Superior's actual volumes for the branch from the 1998 branch templates. The respondents calculated the volumes of ICG and the independents by using that total volume number and the branch manager's volume estimates for competitors to calculate the market shares of ICG and the independents.

[182] According to the Commissioner, in a further adjustment of this 60 percent estimate, the respondents added 133 million litres based on the difference between the total independents' volumes reported in the 1997 competitor survey compiled by the Commissioner and Superior's 1998 estimates of independents' volumes. Adding this 133 million litres to the total volumes estimated by the branch managers led to a combined market share of 58 percent for Superior and ICG in 1998. This adjustment of the estimate assumes that the independents sold as much in 1998 as in 1997 despite the warmer weather and other factors that allegedly depressed the industry wide volumes.

(b) 1998 Branch Templates

[183] The Commissioner submits that the data supplied by the 1998 branch templates to arrive at approximately 58 percent are flawed and conflict with the historical and current position taken by Superior and ICG in their public disclosure statements, the industry practice and other data before the Tribunal.

[184] The Commissioner submits that the 1998 branch templates are flawed for various reasons. The Tribunal notes that it remains unclear whether Superior's own estimated market share for a branch area includes sales to agents. Indeed, Mr. Schweitzer could not confirm at the hearing which approach was used by the branch managers who prepared the templates; he indicated that different approaches may have been used by Superior's branch managers. Further, according to him, the estimates were reviewed at Superior's corporate office and "followed up where inconsistencies arose" (transcript at 32:6109 (6 December 1999)). This part of the process also remains unclear.

[185] In addition, Mr. Schweitzer testified that he expected that the branch managers estimated competitors' volumes by looking at the physical delivery equipment of the competitors which they could observe by driving down the road past the competitors' locations and estimating the number of litres "typically" delivered in a year by those types of vehicles (transcript at 35:7000-02 (9 December 1999)). These estimated volumes were then apparently used to estimate competitors' market shares.

[186] The Tribunal is of the view that the apparent capacity of competitors does not provide an appropriate estimate of sales volumes as conditions change. As an example, a competitor with 15 percent of truck delivery capacity in the market would not necessarily reduce that capacity quickly in the event of warmer weather or reduced sales volumes. There is no evidence that there is a direct correlation between the equipment that a competitor may have and the actual volume of propane sold by that competitor in the marketplace. Further, looking at the equipment is not informative of the intensity with which the assets are used. For example, it does not reflect how much propane is contained in a truck or how often it is filled up in a given week.

(c) 1998 Actual Volumes

[187] The Commissioner notes that actual volumes for 1998 for Superior and ICG were approximately 1.23 billion litres and 0.92 billion litres, respectively, for a combined total of 2.15 billion litres according to the Commissioner. According to internal Superior documents, Superior's management believed that its market share was unchanged at 40 percent since 1996. Using its stated approach, Superior management would have estimated total propane demand for 1998 as 3.08 billion litres (i.e., 1.23/0.4), and on this basis, would have concluded that the combined market share of Superior and ICG was 70 percent (i.e., 2.15/3.08). Internal Superior documents show that this was in fact the combined share that Superior management believed at the time when it was studying the acquisition of ICG.

[188] However, after reviewing its branch templates in 1999, Superior's management concluded that the combined market share for 1998 had declined. For the first time apparently, Superior's management determined that the Statistics Canada estimate of total market demand, 3.95 billion litres in 1998, was the appropriate base for Superior's and ICG's combined share estimate and then calculated a market share of 54 percent using combined actual volumes (i.e., 2.15/3.95).

[189] The Commissioner attributes the decline in the 1998 volume to industry-wide factors. Indeed, the 1998 Superior Propane Income Fund Annual Report (exhibit R-111, tab 1) reads at page 01194:

> Gross profits of $203.5 million in 1998 (16.6 cents per litre of propane sold) declined from 1997 levels by 3%. Propane sales volume in 1998 were 14% lower as a result of reduced heating demand due to weather that was on average 12% warmer than 1997, reduced demand for auto propane due to a declining number of propane powered vehicles, lower oil field activity given the dramatic fall in oil prices in early 1998, and lower crop drying volumes in 1998 due to dry weather and low crop prices.

On this basis, the Commissioner disputes the respondents' claim that the decline in volume in 1998 was due to a decline in combined market share.

[190] In addition, the Commissioner's expert, Mr. Mathieson, estimated the 1998 retail demand to be three billion litres even though the Statistics Canada estimate for that year was 3.95 billion litres. Mr. Mathieson noted that Statistics Canada numbers were useful for establishing directional trends in demand in the industry, but that its annual consumption figures were distorted due to double counting. Until Superior management reviewed the 1998 branch templates in 1999, it did not accept Statistics Canada data and it believed that the combined market share was approximately 70 percent. Moreover, in the spring of 1999, Superior's management was of the view that Superior's market share was in excess of 40 percent of the estimated Canadian retail propane market and that there was no evidence at the time that Superior was losing market share to independents (see testimony of M. Schweitzer, transcript at 31:5861-84 (3 December 1999)).

[191] The Commissioner submits that the respondents have manipulated various data to show that Superior and ICG have been respectively losing market shares since 1989. The Commissioner notes further that Superior did not report this significant decline in its market share to its investors through its quarterly reports. Indeed, in the Commissioner's view, other sources of information for the year 1997, including the competitor survey, the business case and figures prepared by the respondents in preparation for the acquisition of ICG by Superior suggest otherwise.

[192] The Commissioner is critical of Superior's upward adjustment of 133 million litres to its estimate of independents' 1998 sales volumes in the 1998 branch templates summary. The Commissioner argues that an accurate estimate would reflect the decline in industry-wide demand in 1998, which was known when the templates were being prepared and analysed in 1999. The Commissioner argues that since the actual volumes of Superior and ICG has fallen by approximately 14 percent in 1998, the estimates of independents' volumes should be reduced by a similar percentage.

[193] The Commissioner points out that branch managers estimated 1998 competitor sales volume and market share by observing competitor capacity (e.g., number and size of trucks) in 1999, which likely overestimated 1998 sales volumes. He asserts that, although propane demand generally declined, capacity likely did not.

[194] Relying on Statistics Canada annual volume figures showing a decline in demand in 1998 of 511 million litres, the respondents reply that independents' aggregate volumes declined by only six percent. Further, these changes result in an increase in independents' aggregate market share of three percentage points that matches the equivalent decline in the combined market share of Superior and ICG.

[195] The Tribunal accepts the expert evidence of Mr. Mathieson that Statistics Canada data do not reflect actual demand for a given year, and hence doubts that propane demand declined by 511 million litres in 1998. As a result, the Tribunal is not persuaded by the respondents' submission that the independents' aggregate market share increased by three full percentage points in 1998 or that the combined share of Superior and ICG declined by three percentage points.

(d) Other Sources Recognizing a Combined 70 Percent Market Share

[196] Various sources state that Superior and ICG have had so far a combined market share of 70 percent, that the total Canadian retail propane market has been in the order of 3.5 billion litres per annum and that it has remained stable for about the last 10 years.

[197] In 1996, Petro-Canada assisted by a consultant, Arthur D. Little, carried out a valuation of ICG's business. The study entitled "Petro-Canada - ICG Business Valuation" (confidential exhibit CA-1019), dated September 19, 1996, concludes at page 21997 that baseload propane equals 2.4 billion litres (Superior 45 percent, ICG 29 percent, regionals 16 percent, and independents 10 percent), and that autopropane equals 1.2 billion litres (Superior 45 percent, ICG 29 percent, regional 16 percent, and independents 10 percent).

[198] In 1998, the ICG prospectus and the information circular all referred to ICG maintaining an approximate 30 percent market share (exhibit R-47, tab 65, at 04373):

> 4.2 Who are your major competitors in the markets you serve?
>
> Superior Propane Inc. is the largest Propane Company in Canada with approximately *40 % market share.* Together, ICG *and Superior serve approximately 70 % of the market*. In most geographic areas, ICG has a 35-40 % market share or greater except for Ontario, where ICG is in the 15% range and the Maritimes where ICG is a small player. The rest of the market is served by 10 regional and 60 small independent competitors. Within the smaller participants the industry is very dynamic, with buyouts, startups and exits occurring regularly; however *ICG's and Superior's combined market share has not materially changed in the past five years*. (emphasis added)

[199] With respect to Superior's estimates, the Tribunal notes that a detailed analysis of the propane market in 1995-96 was conducted by Superior ("SPI Market Assessment 1995/96": exhibit A-10). This study, which examines each geographic market and end-use across the country, concludes that Superior holds 43 percent, ICG, 29 percent and others, 28 percent of the Canadian retail propane market. This study also states at paragraph 2 on page 00251:

> . . . The sum of these Market estimates, which should theoretically be equal to *total retail propane demand in Canada, was 3.45 billion litres, 13 % lower than Statistics Canada's latest estimate of 3.95 billion litres.* (emphasis added)

[200] In 1996, Mr. Schweitzer attended and participated in the due diligence process which led to the 1996 Superior Propane Income Fund Annual Report. The prospectus, dated September 25, 1996 (exhibit A-202), states at page 03899:

> . . . Superior operates in all ten Canadian provinces and one territory and is the country's largest and only national retail propane marketer with *total sales volumes representing in excess of 40 % of the total estimated Canadian propane retail market.* Although demand varies within market segments, *overall market demand for propane is stable and Superior's size and breadth have historically resulted in consistent sales volumes.* (emphasis added)

[201] The 1997 Superior Propane Income Fund Annual Report (exhibit A-712), which was released in the spring of 1998, confirms at page 07697 that Superior generates sales volumes "in excess of 40 percent of the total estimated Canadian retail propane market".

[202] Peter Jones, formerly Vice-President of Western Operations of Superior, prepared a business case document (confidential exhibit CA-193) when he was at Superior in May 1998 after the publication of the ICG prospectus. At pages 03374 and 03380, the document shows a 41 percent market share for Superior and a 32 percent market share for ICG, on the basis of national volumes of 3.321 billion litres of propane in 1997.

[203] The 1998 Superior Propane Income Fund Annual Report (exhibit R-5, tab 161) also states at page 01693 that "[t]ogether, Superior and ICG serve approximately 300,000 customers through 250 branches and satellite units, representing *approximately 70 percent of the Canadian retail propane market"* (emphasis added).

[204] The Tribunal also notes that even the quarterly report dated October 27, 1999 of Superior Propane Income Fund (exhibit A-3126), which was issued after Mr. Schweitzer became aware of the alleged drop in Superior's market share following Superior's review of the 1998 branch templates, does not report any change to that effect or any correction to the 1998 estimate previously presented. Indeed, page 1 of the quarterly report states:

> . . . Results from the operations of Superior and ICG remained soft this quarter, largely due to *lower overall propane demand* experienced during the third quarter and pressure on margins, as wholesale propane costs continued to rise with the upsurge in crude oil pricing. Soft second and third quarter performance is not unusual in the propane business. Over 60 % of cash flow is usually generated during the winter October through March heating season. As crude oil prices have recently moderated and economic conditions have improved, *the outlook for 1999 remains unchanged*. (emphasis added)

[205] Therefore, it appears to the Tribunal that Superior chose not to report the alleged decline in Superior/ICG's historical 70 percent share of national propane sales to its investors through its quarterly reports.

(e) Conclusion on Market Shares

[206] The evidence suggests that the retail demand for propane was approximately 3.5 billion litres per year up to and including 1997. Similarly all the evidence, except Superior's 1998 branch templates summary, indicates that Superior's and ICG's market shares were approximately 40 percent and 30 percent, respectively, up to and including 1998. In contrast to the evidence stated above regarding Superior's and ICG's market shares, the 1998 branch templates estimates suggest that Superior's and ICG's market shares were 34 percent and 26 percent, respectively, in 1998. This single estimate apparently caused Superior's management to conclude that the drop in the 1998 volume resulted from the penetration of independents in the retail propane business rather than to the warmer weather during that year.

[207] The Tribunal has considerable doubt about the accuracy and validity of the information contained in the 1998 branch templates and hence in the branch templates summary for 1998. It appears to the Tribunal that the methodology for collecting and compiling the data was unsound. For example, errors by branch managers led particularly to double counting of propane volume sold by agents. Moreover, the branch managers' assessment of market shares of competitors were adjusted at Superior's corporate office so as to achieve agreement with Superior's total market size estimate. It appears that the branch templates and the summary thereof are flawed. Errors were made by some branch managers in completing the survey; the procedure for inferring competitor volume and market share from observed capacity likely overstates volume and sales. The Tribunal finds it surprising that Superior's branch managers were unaware until recently of the significant growth of independents' market shares over a ten-year period, but were able to provide accurate estimates of competitors' volume for 1998. Finally, the Tribunal is of the opinion that Superior's management did not properly design the questionnaires, collect the data, or ensure quality control to the extent needed to ensure reliability. Consequently, the Tribunal does not place any weight on the respondents' evidence regarding market shares from the branch templates.

[208] The Tribunal is further concerned about the addition of 133 million litres for the year 1998 to the competitors' aggregate volume in the branch templates summary. This addition was apparently done in recognition that the branch templates summary understated competitor volumes for 1998 in comparison to 1997. The Tribunal believes that such adjustment was inappropriate given that industry-wide volumes declined in 1998.

[209] As noted above, the decline appears due to warmer weather and reduced economic activity in certain propane end-use segments. Given its concern about the branch templates, the Tribunal cannot attribute Superior's and ICG's decline in volume to the suggested increased penetration of independents. Indeed, aside from the 1998 branch templates, there is no evidence to support the changes in market shares claimed by the respondents. The evidence submitted for the period 1988 to 1998 and even for the year 1999 supports the stability of Superior and ICG's combined market share.

[210] As mentioned earlier, the Tribunal accepts that relevant geographic markets are local. Therefore, evidence of high market shares on a local basis can only be rebutted by evidence that entry on a local basis can constrain the exercise of market power. No evidence of that nature has been adduced in this case. Instead, the respondents rely for their evidence on entry and expansion on an alleged declining trend in the combined market share of the merging parties.

[211] In light of the evidence, the Tribunal cannot accept the assertion of the respondents regarding entry and expansion. The Tribunal is of the view that there have been no significant changes in Superior's and ICG's market shares that would suggest such a penetration by independents.

C. REMOVAL OF A VIGOROUS AND EFFECTIVE COMPETITOR

[212] The Commissioner submits that the merger will result in a loss of an effective and vigorous competitor in the market. The Commissioner points out that Superior's own view is that ICG is an important competitor. Based on its internal documents, Superior refers to ICG as its "key-most" important competitor, to ICG's low prices and its low costs, that ICG uses discounted price to acquire new customers, etc. In addition, the Commissioner refers to the affidavit sworn by Mr. Jones in support of the section 100 application in which he said that under his management, ICG would continue as a vigorous competitor to Superior. In his testimony, Mr. Schweitzer also testified that ICG was Superior's most frequent competitor (transcript at 35:6925, 6926 (9 December 1999)).

[213] The Commissioner also refers to the prospectus of September 25, 1996 for the 1996 Superior Propane Income Fund (exhibit A-202) which states at page 03897:

> In addition to Superior, ICG Propane Inc. ("ICG"), which is wholly-owned by Petro-Canada, is the only other retail propane marketer with substantial interprovincial operations. Superior and ICG share approximately three quarters of the Canadian retail market with the balance of the market served by local and regional marketers.

[214] Finally, the Commissioner submits that innovative programs such as the Cap-It program and the Golf-Max program are not offered by any other competitor. The Commissioner argues that the Cap-It program has given ICG a competitive edge over its competitors, including Superior.

[215] The respondents argue that ICG is an ineffective and inefficient competitor. They refer to the testimony of Mr. Sparling who stated that "[i]n the markets where we are we have not seen them as an effective competitor" in support of that argument (confidential transcript at 6:122 (14 October 1999)). They also rely on Mr. Jones's evidence, who described ICG's inefficiency by reference to various cents per litre ("cpl") measures tied to ICG's declining volumes such as operating costs generally and administrative, fleet and delivery costs in particular (transcript at 35:7056-67 (9 December 1999)). They also rely on the expert evidence of Professor Carlton and Dr. Bamberger, who testified that their research was consistent with the evidence that independents, not ICG, constrain Superior's pricing.

[216] The Tribunal is not persuaded that ICG is an ineffective competitor. First, Professor Carlton's analysis of gross margin and earnings before interest, taxes, depreciation and amortization ("EBITDA") in his report (expert affidavit of D. Carlton (17 August 1999): confidential exhibit CR-120) shows at table 2 that from 1994 to 1998, ICG's average gross margin, as a percentage of total revenue, was 44.7 while Superior's was 44.5. Similarly, table 3 of his report shows that ICG's average EBITDA, as a percentage of total revenue, was 11.2 and Superior's was 12.9 over the same period. These numbers may indicate that Superior's financial performance was somewhat better than ICG's but do not indicate that ICG was an ineffective competitor.

[217] Secondly, at page 12 of their report in rebuttal (expert rebuttal affidavit of R. Schwindt and S. Globerman (15 September 1999): confidential exhibit CA-2078), the Commissioner's experts, Professors Schwindt and Globerman, reviewed Professor Carlton's analysis of customers gained and lost which tends to show that Superior loses more or gains fewer customers to or from independents than to or from ICG . They challenge that conclusion noting the case of Bromont, Quebec, where the average size of an account challenged by ICG is three times greater than the average size of an account challenged by an independent. Thus, while ICG may figure in fewer competitive challenges with Superior compared to independents, it is a strong and aggressive competitor for large volume accounts. Accordingly, what appears to Superior as weak competition from ICG may simply be ICG's strategy of competing more intensively for larger accounts which are smaller in number than smaller accounts.

[218] Thirdly, the Tribunal reviewed the answer to undertaking 150 given by ICG on its examination for discovery. It provides a list of 18 services provided by ICG such as the Cap-It program, the Golf-Max program, the Auto-fill program, the SOS Cylinder Delivery and the Aquaculture program. This list also shows which competitors offer or do not offer such services by region. The Tribunal concludes that ICG is an important and aggressive competitor seeking to attract customers with these specialised services.

[219] It appears to the Tribunal that the respondents' submission concerns ICG's alleged financial performance rather than ICG's presence as an effective competitor in the market. The evidence before the Tribunal shows that ICG actively solicits customers from among the largest consumers and through specialised programs, that consumers from various end-uses recognize ICG as an alternative, that consumers use ICG to negotiate prices with Superior and that ICG's market share continues to be approximately 30 percent as indicated above. This evidence does not support the argument that ICG is an ineffective competitor. Professor Carlton's remaining evidence in this regard will be reviewed below.

D. FOREIGN COMPETITION

[220] The Commissioner suggests that foreign competitors do not provide effective competition. The respondents' expert, Professor Carlton, suggests at paragraph 21 of his report (confidential exhibit CR-120) that propane distributors in border states can enter the Canadian market in the event of a post-merger price increase and that the 10 largest propane retailers in the United Sates have over 1,500 retail locations in states that border Canada. However, as the Commissioner points out, entry by propane marketers from the United States has been virtually non-existent in the past.

[221] There are three ways in which a propane marketer from the United States could enter the Canadian propane industry: (1) by serving border locations from existing storage points in the Unites States; (2) by establishing branches in Canada; and (3) by acquiring a Canadian propane marketer. The only evidence of any of these alternatives is that of Professor West's reference to the American company, Lake Gas, located in International Falls, Minnesota, which sells a small volume (50,000 litres of propane) directly across the border in Fort Frances, Ontario.

[222] There is no evidence that a propane marketer from the United States has ever established a branch in Canada. In early 1998, Gaz Metropolitan Inc. indicated its interest through a partnership with AmeriGas, one of the largest propane marketers in the United States, in acquiring ICG. No transaction was concluded and there is no other evidence of successful entry through acquisition by an American propane distributor.

[223] In addition to the barriers to entry discussed above, and for a variety of reasons including billing systems, foreign currency, language and different measurement systems, it appears to the Tribunal that American firms are unlikely to provide effective competition to the merged entity in the Canadian retail propane market.

E. EFFECTIVE REMAINING COMPETITION

[224] The Commissioner alleges that competition following this merger will be weak and ineffective. The Commissioner refers in particular to evidence that shows that Superior and ICG are the price leaders and that the independent firms typically follow the prices set by Superior and ICG. Hence the disappearance of ICG would remove the only significant constraint on Superior's ability to set prices.

[225] Regarding the effectiveness of independent competitors and the constraining role of ICG, the respondents present the expert testimony and report of Professor Carlton, which will be addressed below. Other evidence suggests that the Commissioner's concern for effective remaining competition is well founded. For example, the merged firm will be the only one in Canada with the capability to serve national accounts at the level of service currently offered by Superior or ICG. None of the remaining firms can offer that level of service effectively and hence will not be effective competitors to the merged firm for the business of national accounts.

[226] According to Superior, there are up to 200 independent firms. The Commissioner points out that many of these firms are agents of the merging firms or are associated with them as "bulk dealers". A bulk dealer purchases propane, takes title to the product, and agrees with either ICG or Superior to market in well defined territories. With respect to its bulk dealers, ICG determines the price, holds the customer contract, and bills the client directly. The Tribunal does not regard these agents and bulk dealers as strong competitors to the merging parties, particularly with respect to existing customers.

[227] The Commissioner contends that fringe and regional competition exists in some local propane markets, but that sustained or significant competition exists only between the merging parties. The evidence for this submission is that independent propane marketers are price followers, they are in many cases unknown to consumers in their own markets, they differentiate their products and locations to avoid direct competition with the merging parties and they compete mainly among themselves. The latter point leads to Professors Schwindt and Globerman's reference to "churn". For example, Mr. Sparling submitted that Sparling does not actively solicit customers from rivals, particularly from Superior. He testified:

> MR. MILLER: Do you actively solicit customers from your rivals?
> MR. SPARLING: No.
> MR. MILLER: Do you have any instructions or directions to represent --

> MR. SPARLING: We discourage that. We refer to that as cold calling. It's not to say it doesn't happen in this industry, but we certainly discourage it, and we would define that as a sales person driving up and down a given road and wherever they see a tank they simply go in and cold call the customer. We discourage that.
>
> transcript at 12:1731 (14 October 1999).

[228] He also testified that Sparling does not seek to be a price leader; rather, Sparling emphasizes "consistent pricing" from customer to customer (transcript at 12:1728 (14 October 1999)). In the Tribunal's view, this comment can reflect consciously parallel behaviour that characterizes some oligopoly markets; possibly it reflects only that Superior and Sparling have highly differentiated marketing strategies and hence do not compete directly for this reason. In either case, it suggests that Sparling cannot be viewed as an effective competitor to Superior or to the merged entity.

[229] Further evidence of weak remaining competition is provided by Mr. Edwards of EDPRO Energy Group Inc. ("EDPRO") who established his company in June 1997. Mr. Edwards said that he established the business in London, Ontario, because of its proximity to the Sarnia propane supply source and to avoid competing in a market with a dominant firm. Based on his experience in the Maritimes, Mr. Edwards felt that competing with a dominant propane marketer was not likely to yield success. Further, Mr. Edwards explained that after two years in the business, EDPRO's top three customers represent 75 percent of EDPRO's total volume.

[230] Moreover, EDPRO's own organization, effectively a franchise, indicates that its own dealer-associates operate as bulk dealers rather than as competitors. The dealer-associates purchase propane from EDPRO and operate under the EDPRO name in exclusive territories established by agreement with EDPRO.

[231] It appears to the Tribunal that residential customers are not well informed about alternate propane marketers serving their areas other than the merging parties. For instance, one of the Commissioner's factual witnesses, Ms. Simons, was unable to determine which suitable propane companies were delivering propane in Renfrew, Ontario. During cross-examination by the respondents, she stated that when building her house in Renfrew, she was aware only of Superior and ICG and selected ICG on the basis of price. She had not been solicited by any other propane suppliers and was only familiar with one other propane supplier, Rainbow Propane, which supplies 100-pound tanks to cottages (transcript at 19:3304 (26 October 1999)).

[232] The Tribunal also heard evidence that residential customers learn about competitors by word-of-mouth from neighbours. This lack of information regarding competitors suggests to the Tribunal that the independent firms do not market their services as aggressively as ICG or Superior and that customer awareness is weak as the Commissioner asserts.

[233] The respondents claim that certain firms could easily enter the retail propane business, and they twice quote part of paragraph 3.2.2.7 of the MEG's, cited above at paragraph [57], which indicates that, under certain conditions, potential competitors are considered at the stage of market delineation. On this basis, the respondents advocate including upstream propane producers, suppliers from distant locations, and suppliers of alternate fuels in the relevant market and they identify certain such firms by name. The respondents' quotation from paragraph 3.2.2.7 of the MEG's includes the following:

> ...Where it can be established that such a seller would likely adapt its existing facilities to produce the relevant product in sufficient quantities to constrain a significant and nontransitory price increase in the relevant market, this source of competition will generally be included within the relevant market.

[234] The Tribunal notes that the respondents have not provided any information on the sales of retail propane that the named potential competitors might reasonably be expected to make and, thus, have not established that such sales could exercise a constraining influence on the pricing of products sold within the relevant market.

[235] Claiming support from footnote 22 of the MEG's, the respondents also argue that, although market shares could not reasonably be attributed to these potential competitors, the existence of these firms implies that the market shares of actual propane retailers overstate the market position of the actual retailers. In effect, the respondents ask the Tribunal to place less weight on estimated market shares of Superior, ICG and presumably the independent firms because of the presence of potential competitors.

[236] In this regard, the Tribunal notes that the respondents have incompletely quoted from the MEG's which, immediately following their quoted passage, also state:

> . . . However, potential competition from sellers who could produce the relevant product by facilities that are actually producing another product will not be assessed at the market definition stage of the assessment of the merger where:
>
> (i) such a seller would likely encounter significant difficulty distributing or marketing the relevant product; or,
>
> (ii) new production or distribution facilities would be required to produce and sell on a significant scale.
>
> In these circumstances, this source of competition will instead be considered subsequent to the delineation of the relevant market, in assessment of the likelihood of future entry pursuant to section 93(d) of the Act.

[237] On the basis of the evidence in this case regarding, inter alia, customer contracts and scale economies, the Tribunal believes that the output of the potential entrants cited by the respondents would not be included in the relevant market if the MEG's were applied. As a consequence, there is no reason to believe that the market shares of actual competitors overstate their market positions.

[238] On the basis of the evidence submitted, the Tribunal believes that there is insufficient evidence to demonstrate that there will be effective remaining competition capable of constraining the exercise of market power by the merged entity.

[239] The respondents' main piece of evidence in this area is Professor Carlton's statistical analysis of Superior's margin. He concludes that, whereas a substantial presence by ICG in Superior's market area does not constrain Superior's pricing, the aggregate of the independents' volumes in that market does provide a competitive restraint on Superior's pricing. The Tribunal will discuss this opinion evidence below.

F. PREVENTION OF COMPETITION

[240] In addition to the alleged substantial lessening of competition pursuant to sections 92 and 93 of the Act, the Commissioner submits that the merger will lead to a prevention of competition in the Maritimes that will be substantial.

[241] ICG serves the Maritimes provinces from its branch located in Moncton, New Brunswick. The Commissioner points out that ICG had extensive plans, prior to its acquisition by Superior, to expand its business in the Maritimes by establishing branch operations in Sydney, Nova Scotia.

[242] The Commissioner submits that Irving Oil Limited and Superior were the principal alternate competitors in this region and that the merger terminates ICG's activity as a competitor in Atlantic Canada. He submits that Superior and Irving Oil had a duopoly in the Maritimes. The Commissioner argues that ICG has developed and pursued competition in the Maritimes and has evident capability and plans to expand its presence in order to increase competition in the Maritimes. He introduced ICG's plans to obtain Canadian Tire's business where ICG stated clearly that they would dedicate a $200,000 tractor-trailer to service the Canadian Tire dealer network in the Atlantic provinces (exhibit A-851 at 10980). The Commissioner submits that the acquisition of ICG by Superior will substantially prevent competition in Atlantic Canada.

[243] The respondents did not call any evidence nor made any submissions regarding the Commissioner's allegation that a substantial prevention of competition is likely to occur in Atlantic Canada.

[244] The Tribunal recognizes that the concept of prevention of competition has not received much attention in Canadian jurisprudence. In Howard Smith Paper Mills, Ltd. et al. v. The Queen (1957), 8 D.L.R. (2d) 449 (S.C.C.), the Supreme Court of Canada had to consider the meaning of the word "prevent" in relation to the word "unduly" and concluded that, when used together, the word "prevent" means "hinder or impede" in contrast to absolute elimination.

[245] The MEG's, cited above at paragraph [57], explain the expression "prevention of competition" at paragraph 2.3 as follows:

> Similarly, competition can be prevented by conduct that is either unilateral or interdependent. Competition can be prevented as a result of unilateral behaviour where a merger enables a single firm to maintain higher prices than what would exist in absence of the merger, by hindering or impeding the development of increased competition. For example, the acquisition of an increasingly vigorous competitor in the market or of a potential entrant would likely impede the development of greater competition in the relevant market.

> Situations where a market leader pre-empts the acquisition of the acquiree by another competitor, or where a potential entrant acquires an existing business instead of establishing new facilities, can yield a similar result.
>
> Competition can also be prevented where a merger will inhibit the development of greater rivalry in a market already characterized by interdependent behaviour. This can occur, for example, as a result of the acquisition of a future entrant or of an increasingly vigorous incumbent in a highly stable market.

[246] In light of ICG's plans to vigorously expand its activities in Atlantic Canada and in the absence of any evidence to the contrary, the Tribunal is of the view that there will likely be a substantial prevention of competition in Atlantic Canada as a result of the merger.

G. STATISTICAL AND ECONOMETRIC EVIDENCE

(1) Commissioner's Expert Evidence

[247] Michael R. Ward, one of the Commissioner's experts, provided econometric evidence about the likely effects of the merger on Superior's ability to exercise market power. He used the well established approach of "merger simulation", a method developed specifically for analysing the competitive effects of mergers in differentiated product industries. In such industries, the potential for a unilateral price increase is high when the merging parties place competitive constraints on each other by virtue of a high degree of substitutability between their products prior to the merger. Prior to a merger, a unilateral price increase by one firm may lead to a loss of sales to its closest competitors. However, a unilateral price increase following a merger among close competitors may lead to a reduced loss of sales when the products of the merging companies are closer substitutes for each other than for the products of other firms in the industry (see generally exhibit R-108, J.A. Hausman and G.K. Leonard, "Economic Analysis of Differentiated Products Mergers Using Real World Data" (1997) 5:3 George Mason L. Rev. 321).

[248] In the first part of his report (expert affidavit of M.R. Ward (30 August 1999): exhibit A-2059), Professor Ward estimates the structure of demand for propane. He then uses these estimates to simulate the instant merger's likely effects. In order to determine the degree of substitution between the products of the merging parties, Professor Ward obtained data on ICG and Superior branches in 46 out of 74 of Professor West's geographic markets for a period of 54 months up to 1998 for which data was available. He used Superior data on prices, sales, and product groupings, and ICG data on litres sold, dollar sales, gross profits, and product groupings to establish volumes and prices for each firm in four product segments: residential, industrial, autopropane, and "other" which includes construction, commercial, government and agriculture end-uses.

[249] With this data set, Professor Ward measures the extent to which consumers substitute between ICG and Superior using a linear approximation to the Almost Ideal Demand System, a widely-accepted approach to demand estimation. He finds that an increase in ICG's price results in a statistically significant increase in Superior's market share in the residential and industrial segments, and that an increase in Superior's price reduces its market share significantly in those segments. Professor Ward interprets these findings as evidence for consumer substitution between the products of ICG and

Superior, i.e., that they compete directly and their products are close substitutes for each other in the eyes of consumers. His report shows at page 21 that the results for the autopropane segment have the expected signs but are not statistically significant; results for the "other" segment are not reported due to lack of significance or implied upward-sloping demand curves.

[250] Professor Ward's evidence at page 26 of his report also demonstrates that Superior reacts strategically to ICG's pricing behavior. He finds that when increases in ICG's unique costs result in a price increase of one percent, Superior increases its price by approximately two-thirds of a percent in the residential, industrial and automotive categories. He expects that ICG would respond to Superior's price increases but does not have the data to estimate that strategic relationship. In his simulation analyses, he makes the assumption that ICG will react to Superior's price changes in the same way as Superior reacts to ICG's pricing decisions as stated at page 27 of his report.

[251] Using the statistical results obtained with the Almost Ideal Demand System, Professor Ward estimates the own-price and cross-price elasticities of demand in order to estimate the impact of the merger on product prices, a step referred to as simulation. Since he did not know the price elasticity of demand for propane, he estimated firm-level elasticities with three different assumptions for that key measure. At table 6 on page 29 of this report, he finds, for example, that if the price elasticity of demand for propane is -1.5, then the price elasticity of demand for ICG propane is -2.40 in the residential segment and the corresponding Superior price elasticity is -1.97 with regional and discount dealers in the market. He assumes that substitutability between the merging parties and independent firms is exactly half as large as that between ICG and Superior.

[252] Combining the firm-level price elasticities with the evidence on strategic pricing (which would no longer occur post-merger), Professor Ward estimates the change in price due to the merger assuming there are no changes in marginal costs, i.e., no efficiency gains and no entry or supply-substitution by product segment. Depending on the elasticity assumed for propane demand, on the presence or absence of regional and discount dealers, and on the product segment, the average estimated price increases are between 1.4 percent and 15.1 percent. Table 7 on page 30 of his report shows that, using propane demand elasticity of -1.5, the average price increases are 8 percent in residential, 8.9 percent in industrial and 7.7 percent in automotive taking regional and discount dealers into account. He concludes at page 36:

> . . . Fifth, ignoring possible price reductions from merger efficiencies, entry or supply-side substitution, the incorporation of these estimates into a merger simulation implies prices will increase due to the merger. The size of the price increase depends primarily on the demand for propane. Specifically, if propane demand is relatively inelastic, the merger is likely to raise average prices by 8 % or more.

[253] At the time of his analysis, Professor Ward did not have the statistical results of Professors Ryan and Plourde regarding the price elasticity of demand for propane. When this information was made available, he re-calculated the effects of the merger on prices using a propane demand elasticity of -1.0, based on their conclusion that the demand for propane was price-inelastic. In those calculations, he also relaxed his assumption that substitutability between independent firms and ICG and Superior was half that of the estimated substitutability between ICG and Superior. Instead, he assumed that they were equally substitutable. Table 2 on page 8 of his report in reply (expert reply affidavit of M.R. Ward (4

October 1999): confidential exhibit CA-2060) shows that he estimates that the average price increases for residential, industrial and automotive are 11.7 percent, 7.7 percent, and 8.7 percent, respectively, when independent firms are in the market.

[254] The respondents' experts, Professor Carlton and Dr. Bamberger, in their report in rebuttal (expert rebuttal affidavit of D.W. Carlton and G.E. Bamberger (27 September 1999): confidential exhibit CR-123), argue that Professor Ward's estimated price increases are overstated because he does not include the effects of efficiencies, entry or supply-side substitution in his analyses. They also criticize Professor Ward for not justifying his assumptions in this regard. They also consider that he has not adequately recognized the constraining effects of independent firms on Superior and ICG pricing. The respondents argue strenuously that Professor Ward did not provide an opinion as to the quantum of any likely price increases post-merger and, therefore, did not provide a basis for finding a substantial lessening of competition.

[255] Noting its earlier comments regarding the evidence of entry and of supply substitution, the Tribunal does not accept the criticisms of Professor Carlton and Dr. Bamberger in these areas.

[256] In reply to their criticism, Professor Ward re-calculated the price impacts including the effects of efficiencies and reported virtually identical price increases at all levels of efficiency gains up to and including $40 million per year, as shown at tables 3 to 5 on pages 10 to 12 of his report in reply (confidential exhibit CA-2060). In a further re-calculation, at the request of the respondents, that incorporated the approach to cost savings as outlined by Hausman and Leonard, cited above at paragraph [247], Professor Ward found that efficiencies had a stronger impact but resulted in price reductions of -0.9 percent in residential, -1.1 percent in industrial and -1.9 percent in automotive only at the $40 million level and then only if 100 percent of these efficiency gains resulted in variable-cost savings (Ward Undertaking (16 November 1999): exhibit A-2079, tables 3-5). As discussed below, no one including the respondents' experts on efficiency gains has suggested that this merger will produce $40 million of annual savings in variable costs.

[257] In the Tribunal's view, Professor Ward's analysis, even though it does not take efficiencies into account, is highly relevant to a determination as to whether there is a likely substantial lessening of competition.

[258] The Tribunal concludes that evidence of an actual or likely price increase is not necessary to find a substantial lessening of competition. What is necessary is evidence that a merger will create or enhance market power which, according to paragraph 2.1 of the MEG's, cited above at paragraph [57], is "the ability to profitably influence price, quality, variety, service, advertising, innovation or other dimensions of competition". There is no requirement under the Act to find that the merged entity will likely raise the price (or reduce quality or service). The only requirement under section 92 is for the Tribunal to decide whether the merged entity has the ability to do so.

[259] For this reason, Professor Ward's simulations both in his report in reply and his undertaking which take efficiencies into account to address the respondents' criticism are irrelevant. The Tribunal infers from the results of his other simulations that the merged entity would have the ability to raise the price of propane.

[260] As to the respondents' claim that Professor Ward has not offered an opinion on the extent and likelihood of a price increase, the Tribunal notes that his initial simulation results at table 7, on page 30 of his report (exhibit A-2059), provided six sets of estimates that were calculated based on three assumed values for the price elasticity of propane demand and on two scenarios concerning the presence or absence of regional and discount dealers in the market. He concluded that the merger would lead to higher prices under all assumed conditions. In his re-calculations in reply at table 2, on page 8 of his report in reply (confidential exhibit CA-2060), Professor Ward further varied his assumptions and obtained similar results.

[261] The fact that Professor Ward simulated the merger's effects under a variety of assumptions and reached the same conclusion gives the Tribunal more confidence in his opinion than it would have if he had restricted his simulations to a narrowly defined set of assumptions. The Tribunal views Professor Ward's conclusion in his initial report, that average prices would rise by eight percent or more as a result of the merger assuming that propane demand is relatively inelastic, as a valid opinion, particularly given his further simulation results in reply.

(2) Respondents' Expert Evidence

[262] The respondents' experts, Professor Carlton and Dr. Bamberger, were asked to evaluate the Commissioner's claim that Superior's proposed acquisition of ICG would result in a substantial prevention or lessening of competition in the market for propane in Canada. They concluded that there was no systematic evidence that the proposed merger would have such effect. They considered the competitive restraint on Superior, customer gains and losses, gross profit margin and EBITDA.

(a) Competitive Restraint

[263] Professor Carlton presented econometric evidence that ICG has not provided a competitive restraint on Superior's pricing but that the independent propane dealers, in aggregate, have provided such constraint. This evidence contradicts the Commissioner's assertion that where significant competition takes place in the propane business, it is between ICG and Superior. If Professor Carlton is correct, then the removal by this merger of ICG as a competitor should not allow Superior to raise its price.

[264] In his econometric models, Professor Carlton posits a relationship between Superior's gross profit margin and the "substantial presence" of ICG and of the remaining firms in aggregate. A substantial presence is measured in four separate ways. In the first model, the presence of ICG and of the other firms in aggregate are deemed substantial if their respective market shares are at least 15 percent. In the second and following models, a deemed substantial presence requires a market share of at least 20 percent, 25 percent and 30 percent, respectively.

[265] Professor Carlton measures these hypothesized relationships by applying the regression analysis technique of ordinary least squares ("OLS") to 1998 monthly data on Superior's prices, costs, margins and volumes at the branch level, hence pooling time-series and cross-sectional data. These data come from Superior's internal records as do the proxies for secondary distribution costs. The prices of alternative fuels come from Statistics Canada databases. The 1998 market share data used to define the dichotomous substantial presence variables are taken from the branch templates prepared by Superior's branch managers in 1999. Professor Carlton controls for a variety of other exogenous variables and conducts additional OLS regression analyses for 1997 (using 1998 market shares) and also by profit margin in various end-uses. His results in these latter OLS analyses appear to use similar models and definitions of variables and to support his 1998 results; accordingly, the 1998 OLS results will be the focus of the Tribunal's review.

[266] Professor Carlton finds that Superior's gross profit margin is higher where ICG has a substantial presence. Selecting model 1 as an example, Superior's margin is 1.47 cpl higher at locations where ICG has a substantial presence (i.e., 15 percent or greater market share) than where it does not. In all four models, the margin impact is positive and statistically significant.

[267] The results for the independent firms show that the aggregate substantial presence of those firms decreases Superior's margin. Where the aggregate market share of the other firms is at least 15 percent, Superior's margin is 0.80 cpl lower than where the aggregate market share is less than 15 percent. Similarly, where the aggregate market share of the other firms is at least 30 percent, Superior's margin is 0.56 cpl lower than where the aggregate market share is less than 30 percent. The effect on margin is negative and statistically significant in all four models.

[268] On the basis of these econometric results, Professor Carlton concludes that ICG does not constrain Superior's pricing behaviour, and that the merger will not enable Superior to increase prices, principally because of the discipline exerted by independent firms. At footnote 31, on page 15 of his report (confidential exhibit CR-120), Professor Carlton suggests that his results are consistent with the alleged "inefficiency" of ICG (i.e., that it has been badly managed).

[269] The Tribunal notes that Professor Carlton's finding that Superior's gross margin is higher at locations where ICG has a substantial presence is an unexpected and unusual result and it is perhaps his most important result. Several criticisms were offered; the Tribunal will comment on the ones that seem most significant.

[270] The Commissioner suggests that substantial presence variables may be proxies for market concentration. If this were the case, then Professor Carlton's results would tend to show that Superior's gross profit margin is higher in areas where concentration is higher, rather than demonstrating that ICG is a weak competitor. Despite Professor Carlton and Dr. Bamberger's reply on this point, when taken in conjunction with various internal Superior reports of challenging behaviour by ICG, the Tribunal believes that the better view is that Professor Carlton's results reflect concentration.

[271] The specification of the substantial presence of the independent firms is also problematic. Professor Carlton aggregates the volumes of all independent firms into one market share. Thus, as Professors Schwindt and Globerman point out at page 9 of their affidavit in rebuttal (confidential exhibit CA-2078), the statistical result would be the same whether the substantial presence variable combined market shares of many independent firms or represented the market share of one large independent firm. The Tribunal would expect different competitive effects if there were many independent firms with a certain combined share than if there were just one with that share. Hence the substantial presence variable that Professor Carlton used may not be a good measure of the competitive effect of independent firms.

[272] Professor Carlton's models posit that Superior's margin is affected by ICG's and the independents' substantial presence. The Commissioner suggests that the opposite relationship may also hold simultaneously and criticizes Professor Carlton's statistical results for failing to take account of the simultaneous relationship between Superior's profits and the substantial presence variables. Such simultaneity is known to lead to biassed statistical estimates when the OLS method is used.

[273] Replying to a similar criticism of his OLS results from Professor Ward (expert rebuttal affidavit of M.R. Ward (14 September 1999): exhibit A-2080), Professor Carlton repeats his analysis using the method of two-stage least squares ("2SLS") in order to take simultaneity into account. This further work indicates to the Tribunal that Professor Carlton gives some credence to this criticism. Footnote 15 on page 12 of his report in reply (expert reply affidavit of D.W. Carlton and B.E. Bamberger (19 September 1999): confidential exhibit CR-122) states that the results therefrom:

> . . . provide no systematic support for the Commissioner's claim that ICG significantly constrains Superior's retail propane prices. Full regression results are reported in Appendix G.

[274] It is instructive to compare Professor Carlton's 2SLS results with his OLS results. All four OLS models demonstrated that Superior's profit margin was higher where ICG had a substantial presence and that the positive relationship was statistically significant. With the method of 2SLS, one model results in a positive coefficient for ICG's substantial presence, three of the models now show negative coefficients for this relationship, and none of these four coefficients is statistically significant. These differences suggest to the Tribunal that Professor Carlton's OLS results are statistically biassed and not reliable.

[275] For example, where substantial presence is defined at the 15 percent level, Professor Carlton's OLS results indicate that Superior's margin is 1.47 cpl higher where ICG's presence is substantial than where it is not, and that the relationship is statistically significant. However, the 2SLS results indicate that Superior's margin is 1.60 cpl lower where ICG's presence is substantial than where it is not; the relationship is not statistically significant.

[276] Thus, while Professor Carlton is correct to claim that his 2SLS results do not provide systematic support for the Commissioner's claim, it also appears that they do not provide support for his own conclusions. In particular, the 2SLS results support neither the conclusion that Superior is more profitable at locations where ICG has a substantial presence nor the suggestion that ICG is an ineffective competitor. Indeed, the lack of statistical significance for ICG's substantial presence indicates that no relationship has been found.

[277] With respect to the presence of independents, Professor Carlton's 2SLS results for the aggregate effect thereof also differ from his OLS results. In all four models, the substantial presence of independents has a much stronger statistically significant effect on Superior's margin than with OLS methods. For example, with a 15 percent substantial presence, the OLS impact of independents is -0.80 cpl; with 2SLS, the impact is -3.49 cpl. Similar differences are found across all four models.

[278] The Tribunal observes that the measures of substantial presence for independent firms in aggregate depend on the market share data from Superior's branch templates, the limitations of which have already been noted. Simply put, the Tribunal believes that the substantial presence of independent firms has been measured with error and that the resulting coefficient estimates, whether OLS or 2SLS, are unreliable.

[279] The Tribunal regards Professor Ward’s criticism regarding simultaneity as appropriate and, therefore, places greater weight on Professor Carlton’s 2SLS results. The Tribunal rejects Professor Carlton’s OLS results and the implications which he draws therefrom. Moreover, since Professor Carlton’s 2SLS results provide no information on the relationship between Superior’s margin and ICG’s substantial presence, the Tribunal can only conclude that Professor Carlton’s econometric results are not useful in this case.

(b) Acquisition of Premier

[280] To determine whether the merger is likely to result in a price increase, Professor Carlton examined the price effects of Superior’s acquisition of Premier, which was completed in 1994. Premier had been a strong competitor in British Columbia and Alberta. After studying Superior’s prices in those provinces before and after the acquisition, Professor Carlton finds, at paragraph 47 of his report (confidential exhibit CR-120), that Superior’s average margin is statistically lower after the acquisition and that end-use margins are significantly lower for three end-uses -- agent, automotive and residential.

[281] Apart from the statistical and interpretive problems which Professors Schwindt and Globerman find with Professor Carlton’s evidence, they note at page 14 of their report in rebuttal (confidential exhibit CA-2078) that Premier’s sales were more heavily oriented to autopropane than were Superior’s and suggest that this is why the average margin declined post-merger. That the Premier merger lowered Superior’s profit margin is surprising. Together with the differing circumstances of the instant merger and the absence of reply by Professor Carlton to Professors Schwindt and Globerman’s rebuttal points, the Tribunal believes that Professor Carlton’s analysis of the Premier merger does not provide a good indication of the likely effects of the merger under consideration here.

(c) Customer Gains and Losses

[282] Professor Carlton reports at paragraph 42 and table 12 of his report (confidential exhibit CR-120) his analysis of Superior’s customer gains and losses. For 1996, his customer count data show that Superior experienced a net loss of 149 customers to ICG and 1,862 customers to independent firms. In 1997, Superior enjoyed a net gain of 157 customers from ICG but a net loss of 2,435 customers to independents. In 1998, Superior also had a net gain of 448 customers from ICG and a net loss of 995 customers to independents. He concludes that "Superior systematically loses more, or gains fewer, customers to or from independents than ICG. These results are consistent with my regression findings that independents, and not ICG, constrain Superior’s propane prices" (ibid. at paragraph 42).

[283] The Tribunal finds Professor Carlton’s conclusion somewhat difficult to understand. It is not the case that Superior gained fewer customers from independents than from ICG. In each of the three years, his data show that Superior gained more customers from independents than from ICG (1,298 from independents versus 793 from ICG in 1996; 1,201 versus 1,115 in 1997; and 1,207 versus 1,116 in 1998). On a net basis, Superior gained more customers from ICG than it lost in two of those years and lost more customers than it gained from ICG in one year. It is not clear to the Tribunal what systematic solutions can be drawn from these numbers.

[284] Professors Schwindt and Globerman, at page 12 of their report in rebuttal (confidential exhibit CA-2078), point out that the counting of actual customer gains and losses does not measure the number of customers that ICG challenged. Moreover, as they point out, counting customers will not reflect the size of those customers or the volumes won or lost. It may be, for example, that ICG's business strategy is more focussed on large-volume customers and hence, it may not challenge many small accounts that would likely be of interest to independent marketers. Referring to ICG's experience in Bromont, Quebec, they state that a simple counting of customers gained and lost is misleading.

[285] As Professor Carlton does not challenge these criticisms in his report in reply (confidential exhibit CR-121), the Tribunal is of the view that counting actual customers gained and lost does not, in itself, establish the ineffectiveness of ICG as a competitor to Superior.

(d) Gross Profit Margin

[286] In Professor Carlton's view, as stated at paragraph 12 of his report (confidential exhibit CR-120), the Commissioner's claim is that retail propane prices depend on the number of national suppliers in a country. If the Commissioner were correct, he argues, then gross profit margins of propane dealers should be higher in Canada where the industry is more concentrated than in the United States where there are more "national retail suppliers" competing in a local market. He presents evidence for the period 1994-98 showing that the average gross profit margin (i.e., gross profits as a percentage of revenues) was lower for Superior (44.5) and ICG (44.7) than for a sample consisting of the seven largest American propane dealers with multi-market operations on which he could collect such data (47.9). This evidence, he argues, suggests that profitability is not a function of industry concentration and hence the merger of ICG and Superior will not present a problem for competition.

[287] The Commissioner's experts, Professors Schwindt and Globerman, criticize this statistical finding for failing to take differences in product mix into account. The overall gross margins of propane dealers might vary because of profitability differences in the end-use markets they serve. Accordingly, they argue, the lower gross profit margins of ICG and Superior reflect the fact that they are more heavily involved with low-margin autopropane supply and less involved with residential propane than their American counterparts. Once the gross margins are corrected for differences in product mix, the margins of ICG and Superior are higher than the ones of the dealers in the United States.

[288] At page 2 of his report in reply (confidential exhibit CR-122), Professor Carlton recalculates Superior's gross margin for 1998 assuming it had the same business mix as each of the three American propane dealers. The resulting average profit margin is higher than Superior's margin for that year and tends to support Professors Schwindt and Globerman's citation. Professor Carlton does not report such calculations for ICG. In the Tribunal's opinion, Professor Carlton has not shown that the Commissioner's business mix criticism is mistaken.

(e) EBITDA

[289] Professor Carlton's evidence at table 3 of his report (confidential exhibit CR-120) is that EBITDA as a percentage of revenues are lower for ICG (11.2) and Superior (12.9) than for his sample of American dealers (15.6) for the 1994-98 period. He interprets these data as further support for his view that profitability is not related to industry concentration.

[290] In the propane business, EBITDA equal gross profit less secondary distribution and other administrative costs, and hence, is a measure of net cash flow from operations. As a profit measure, it has the advantage of not being distorted by the arbitrary treatment of depreciation/amortization under generally accepted accounting rules, by the choice of capital structure which influences interest expense or by tax planning opportunities. Accordingly, EBITDA may be preferred to other profitability measures (such as net income) that measure profit with such distortions and are unreliable when making inter-firm comparisons.

[291] The Commissioner takes issue with Professor Carlton's interpretation, stating that differences in EBITDA can be due to differences in "net margin" across applications. He notes, for example, that net margins can differ due to differences in capital investment across end-uses with the resulting differences in depreciation expense across end-uses. This argument is similar to the business mix argument discussed above with respect to differences in gross profit margins across firms.

[292] In fact, Superior's own estimate of its 1996 net margins was 0.1118 cpl in the residential segment and -0.0032 cpl in auto. In 1995, those net margins were 0.1065 cpl and 0.0044 cpl, respectively (confidential exhibit CA-16 at 00923). The Commissioner appears to suggest that such differences in net margin account for differences in EBITDA/revenue between Canadian and American propane dealers as the former are more heavily involved in autopropane than are the latter.

[293] However, the definition of net margins is not clear. If, as it appears, it includes depreciation and other costs such as head office costs, interest expense and taxes that are not measured by end-use, then any attempt to allocate such expenses to end-uses served by a propane dealer will require arbitrary allocation rules that make the results similarly arbitrary, if not meaningless. For example, how should the depreciation on a delivery truck that serves both agricultural and residential customers be allocated between these end-uses? Should it be done proportionately to litres delivered, to the number of customers, to distances, to time involved? Each such allocation procedure is as good as any other, and equally arbitrary. Moreover, it is not clear how depreciation should be measured. Certainly, the accounting treatment of depreciation does not attempt to measure the "wear and tear" that takes place; accounting rules attempt only to spread the purchase price of an asset over some period of time in order to match the cost of the asset against the revenue it generated in a particular period of time as required by accounting principles.

[294] The allocation procedures adopted by Superior illustrate the problem. Overhead costs were allocated to market segments and to geographic markets according to volumes, and operating costs according to the number of deliveries. The stated justification for these procedures is that "they appear to produce the best results" (confidential exhibit CA-16 at 00923).

[295] At paragraph 9 of his report in reply (confidential exhibit CR-122), Professor Carlton suggests that although gross margins differ according to business mix, they reflect differences in secondary distribution costs across end-uses. Presumably, he means that a firm requires a higher gross profit margin in an end-use with higher secondary costs than in an end-use with lower secondary costs in order to operate profitably. However, he presents no evidence that this relationship holds in the propane business. Indeed, he simply states that "[t]here is no reason to believe that prices for residential and auto end-uses differ substantially after all (not just primary distribution) costs are accounted for".

[296] The evidence cited above on Superior's net margins appears to provide a reason for such a belief. However, these margins depend crucially on the allocation procedures adopted.

[297] The Tribunal is not bound by the allocation procedures that Superior used, and it cannot be sure that other equally reasonable procedures would not produce very different net margins. The Tribunal believes that it cannot attribute differences in EBITDA to differences in margins across end-uses as suggested by the Commissioner. However, it cannot accept without evidence that gross profits reflect higher secondary costs across end-uses as Professor Carlton suggests. It may be that, as with gross profit margins, differences in business mix and secondary distribution costs account for some, possibly large, portion of the EBITDA differences between large Canadian and American dealers. Hence the Tribunal is not prepared to accept Professor Carlton's conclusion that ICG and Superior are less profitable than his sample of large American propane dealers.

H. CONCLUSION

[298] The Commissioner submits that this merger will lead to a substantial lessening of competition in local markets other than "category 1" markets referred to by Professors Schwindt and Globerman, the linked market number one (markets numbers 3, 4, 6, 9, and 7, 27, 40, 50, and 53, as defined by Professor West) and the Sechelt-Powell River market of British Columbia; he also submits that the merger will lead to a prevention of competition in the Maritimes. The Commissioner also submits that national accounts are a separate category of business over which the merged entity will be in a position to exercise market power. In addition to the evidence of high market shares and the difficulty of entry, the Commissioner relies on the expert opinion of Professors Schwindt, Globerman and Ward as to the merger's impact on market structure and the ability of the merged entity to raise price unilaterally.

[299] The respondents argue that the impact of the merger on market structure will be minimal because ICG has not been a strong competitor. In particular, they rely on the expert opinion evidence of Professor Carlton who claims, on the basis of his statistical analysis, that ICG has not constrained Superior's prices in markets where they compete. On this basis, the respondents argue that the removal of ICG by this merger will have no significant competitive impact.

[300] The legal test to be applied under section 92 of the Act is whether the merger or proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially.

[301] In Hillsdown, cited above at paragraph [127], at page 314, the Tribunal held that a finding of a substantial lessening of competition depends on whether the transaction will result in additional market power:

> . . . In assessing the likely effects of a merger, one considers whether the merged firm will be able to exercise market power additional to that which could have been exercised had the merger not occurred. A merger will lessen competition if it enhances the ability of the merging parties to exercise "market power" by either preserving, adding to or creating the power to raise prices above competitive levels for a significant period of time. One considers the degree of any such likely increase and whether by reference to the particular facts of the case it should be characterized as substantial.

[302] The Tribunal is largely in agreement with this statement; however, it does not agree that a merger which merely preserves existing power over price should be seen as lessening competition. The objective of merger review is to determine whether market power is increased at the margin.

[303] In Southam, cited above at paragraph [47], at page 285, the Tribunal states:

> . . . Most simply, are advertisers likely to be faced with significant higher prices or significantly less choice over a significant period of time than they would be likely to experience in the absence of the acquisitions? (emphasis added)

[304] Subsection 92(2) of the Act makes it clear that market shares and concentration, per se, cannot lead to a finding that a merger will likely prevent or lessen competition in a substantial way. It reads:

> For the purpose of this section, the Tribunal shall not find that a merger or proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially solely on the basis of evidence of concentration or market share.

[305] Although evidence of high market share or concentration is not sufficient to justify for finding that a merger is likely to prevent or lessen competition substantially, it is no doubt a relevant factor. This evidence will be particularly useful in identifying mergers that are likely to result in greater interdependence among the remaining firms in the market.

[306] In light of the evidence, the Tribunal is of the view that the merger is likely to lessen competition substantially in many local markets. The Tribunal accepts the opinion of Professors Schwindt and Globerman regarding the 16 local markets in which the merged entity will have post-merger combined market shares of 95 percent or more and which they referred to as "merger to monopoly". The Tribunal’s concern in these markets is that the merged entity will have the ability to exercise market power by imposing a unilateral price increase.

[307] The Tribunal accepts the Commissioner’s conclusion regarding the eight markets referred to as "category 1" because the merger is expected to have minimal impact on competition between Superior and fringe competitors.

[308] The Tribunal also finds that the merger is likely to lessen competition substantially in a set of markets referred to as "category 3" which identifies 16 markets in which ICG had a substantial market share prior to the merger but where there were at least three competitors including Superior and ICG. In these markets, the Tribunal expects that the elimination of ICG will enhance interdependence and reduce competition.

[309] Finally, the Tribunal finds that the merger is likely to lessen competition substantially through the creation of a dominant firm in the 33 local markets referred to as "category 2". In these markets, the Tribunal is concerned about the increased interdependence effects that the merger is likely to produce.

[310] The Tribunal finds that the merger is likely to lessen competition substantially in coordination services offered to national account customers. It is uncontested that only the merging firms provide these services across Canada. The merger will leave one remaining firm in Canada offering coordination services and there is no evidence to suggest that anyone capable of offering coordination services across Canada will commence those operations. The Tribunal recognizes that not all national account customers rely on these two companies for coordination services. However, the issue is to determine whether the merged firm will be able to exercise market power over its national account customers by imposing a unilateral price increase. The Tribunal is of the view that the merged entity will have the ability to do so as some witnesses indicated that they would be willing to pay more for these services in order to avoid the higher costs of internal coordination.

[311] In coming to the conclusion that the merger will likely result in a substantial lessening of competition, the Tribunal considered the evidence of market shares and concentration provided by Professors West, Schwindt and Globerman and the econometric evidence of Professor Ward on the ability of the merged entity to impose unilateral price increases.

[312] The Tribunal also considers that barriers to entry in the retail propane business are high based on the evidence of Professor Whinston and of several factual witnesses. The Tribunal also notes that entry has occurred in the past but that no evidence demonstrates that it would occur within a reasonable period of time to prevent the exercise of market power. The Tribunal is of the view that Superior's and ICG's respective market shares have remained relatively constant through the last decade. Therefore, the Tribunal believes that Superior and ICG' combined market share constitutes approximately 70 percent of the market on a national basis despite entry by relatively small competitors.

[313] The Tribunal also finds that the merger is likely to prevent competition substantially in Atlantic Canada. In making this finding, the Tribunal relies on the evidence of ICG's plans to vigorously expand its activities in Atlantic Canada. In this respect, the Tribunal also considered the evidence of high market shares, the evidence of high barriers to entry and the lack of evidence that entry did occur in the past.

V. REMEDY

[314] In light of the Tribunal's finding pursuant to section 92 of the Act that the merger is likely to lessen competition substantially in many local markets and for national account customers and that the merger is likely to prevent competition substantially in Atlantic Canada, the Tribunal is of the view that the sole remedy appropriate in this case would be the total divestiture by Superior of all of ICG's shares and assets (including those of the previously integrated branches thereof).

[315] We take note of the Supreme Court's direction in Southam, cited above at paragraph [48], at pages 789 and 790, regarding the appropriate remedy:

> The evil to which the drafters of the *Competition Act* addressed themselves is substantial lessening of competition. See Competition Act, s. 92(1). It hardly needs arguing that the appropriate remedy for a substantial lessening of competition is to restore competition to the point at which it can no longer be said to be substantially less than it was before the merger.

Further, the Supreme Court stated at page 791:

> . . . If the choice is between a remedy that goes farther than is strictly necessary to restore competition to an acceptable level and a remedy that does not go far enough even to reach the acceptable level, then surely the former option must be preferred. At the very least, a remedy must be effective. If the least intrusive of the possible effective remedies overshoots the mark, that is perhaps unfortunate but, from a legal point of view, such a remedy is not defective.

[316] The Tribunal is of the view that since the merger between Superior and ICG is likely to prevent or lessen competition substantially in many local markets across Canada, an order for total divestiture is the sole effective remedy available to the Tribunal. Indeed, the Tribunal is of the view that any order for partial divestiture remedy, while less intrusive, would not effectively restore competition in these markets to the level at which it can no longer be said to be substantially less than it was prior to the merger.

[317] The Tribunal will now turn to the respondents' argument under section 96 of the Act in order to determine whether an order for total divestiture can be made.

VI. EFFICIENCIES

A. SUMMARY OF EFFICIENCY GAINS

[318] The respondents submit that the merger will allow Superior to achieve substantial gains in efficiency. They presented the opinion of Cole Valuation Partners Limited ("Cole") stating that the aggregate of such gains ("efficiency value") falls in the range of $381 million to $421 million measured in constant dollars over 10 years. Cole also opines that these efficiency gains cannot be achieved through other means common to industry practice (expert affidavit of C. O'Leary and E. Fergin (17 August 1999): confidential exhibit CR-112 at 2).

[319] Cole's report entitled "Quantification of the Efficiency Value Resulting from the Merger of Superior Propane and ICG Propane" is exhibit A. Appendix 1 to Cole's report is the report of A.T. Kearney Ltd., a management consulting firm with expertise in, inter alia, logistics and operations management. The two reports and opinions therein constitute the "Cole-Kearney report".

[320] The Cole-Kearney report is lengthy and detailed, but its main conclusions are the efficiency gains in each of the three major areas of operation: corporate centre, customer support and field operations. The corporate centre comprises the functions of corporate management and includes, inter alia, head office management activities, personnel and facilities, information systems technology, wholesale propane dealing and purchasing. The Cole-Kearney report projects that the merged entity will require 44 fewer employees in the head office functions than in the two companies separately, that the head office rent will decline, as will public company costs, legal, and marketing expenditures. The report states that estimated annualized savings of $15.4 million will arise from the elimination of redundancies and that, over 10 years, total projected savings will be $141.5 million taking into account certain one-time gains (e.g., on asset disposals) and costs (such as severance) of achieving those savings (ibid. at 9-12 and appendix 1 at section A).

[321] Customer support functions include sales force and related management, customer service and administration, and regulatory and safety. The Cole-Kearney report expects cost savings arising from the duplication of facilities and redundant personnel in areas where both merging companies operate and from the adoption of Superior's decentralized "business model" in which branches are supported by a centralized branch support centre and regional branch support centres. ICG's five customer care centres will be eliminated. Annualized savings of $7.2 million are projected, resulting in $65.7 million in savings over 10 years after including one-time items (*ibid*. at 13-16 and appendix 1 at section B). The Cole-Kearney report notes that its estimates of cost savings exclude the expected savings from restructurings that Superior and ICG had already planned independent of the merger (*ibid.* appendix 1, tab B1 at 135, 136).

[322] Field operations consist of field sites, branches and plant operations, delivery and service fleets, propane and tank inventory, and supply and transportation. Cost savings are anticipated to result from redundancies due to overlapping geographic markets and from the larger delivery volumes in each territory that will enable the merged entity to reduce supply and transportation costs. For example, the Cole-Kearney report projects 157 eliminated positions, a reduction of 17,694 tanks, and the elimination of 5.9 million litres of propane inventory. Annualized savings of $16.7 million are expected, for a total of $193.6 million over 10 years taking one-time items into account (*ibid*. at 17-20 and appendix 1 at section C).

[323] The aggregate cost savings identified in the Cole-Kearney report amount to $400.8 million (with a margin of approximately $20 million) over 10 years, for a projected efficiency gain of $40.08 million (with a margin of approximately $2 million) per year. The Cole-Kearney report asserts a very high level of confidence in its realization, in part because (a) $13 million to $21 million of savings that would likely be realized in the absence of the merger were excluded; (b) identified efficiency gains from the merger were included only if they could be realized with a high degree of confidence; and (c) the efficiency gains are based on cost savings that are held to be more likely to be realized than revenue gains that are more speculative.

[324] For greater certainty, the Tribunal notes the distinction between "annualized savings" as used in the Cole-Kearney report and "annual savings". The former term is a representative amount of one-year savings in an item when that item's cashflows are measured year by year over 10 years, before taking one-time related cashflows (e.g., due to severance payments, or asset disposals) into account. Accordingly, the savings for that item over 10 years need not equal the annualized saving multiplied by 10. Adding the annualized savings from the three categories discussed above leads to annualized savings of $39.3 million when rounded to one decimal. The latter term refers to all cashflows; for example, if the total savings over 10 years are $400.8 million, then the annual savings are $40.08 million.

B. EFFICIENCY NET PRESENT VALUE

[325] The Cole-Kearney report also provides estimates of the discounted present value of the efficiency gains, the "efficiency net present value", which falls in the range of $291 million to $308 million (*ibid*. at 24). This calculation depends on the discount rate chosen and the particular set of cashflows evaluated (*ibid.*, appendix 4 at 318). Cole adopts the midpoint of $300 million for the point estimate of the efficiency net present value.

C. TRIBUNAL’S SUMMARY AND EVALUATION

[326] The Commissioner argues, based on the report in rebuttal of Professors Schwindt and Globerman and Mr. Kemp (expert rebuttal affidavit of R. Schwindt, S. Globerman, and T. Kemp (15 September 1999): confidential exhibit CA-3131), that $38.51 million claimed annual savings overstate what the merger is likely to generate and that only $21.2 million thereof are appropriately considered. The Commissioner argues that many of the claimed gains in efficiency are cost savings that are pecuniary in nature and should, therefore, be disregarded because they do not represent savings of real economic resources that would be redeployed by other sectors of the economy. Similarly, the Commissioner asserts that certain real economic costs have been classified as pecuniary and hence ignored when they should be deducted from claimed efficiency gains.

[327] The Commissioner also asserts that the magnitudes of certain properly included efficiencies are overstated, and that costs incurred as a result of the merger have been inadequately treated.

[328] In reply, the respondents dispute several of the Commissioner’s criticisms and they submit that the Commissioner’s claims in these areas should be disregarded. As many of the Commissioner’s concerns are not challenged (for example, the elimination of the "wellness programme" as pecuniary savings), the Tribunal is concerned only with those points of disagreement.

(1) Corporate Centre

[329] The Commissioner asserts that claimed cost savings in corporate centre are overstated by approximately $11.9 million per annum. Of these, the respondents defend their treatment of the Management Agreement, procurement, and public company costs which amount to $11.4 million per annum of the Commissioner’s sought-after reduction in corporate centre cost savings.

(a) Management Agreement

[330] Superior is managed by Superior Management Services Limited Partnership ("SMS") which acquired the obligations and benefits (the "Management Agreement") of managing Superior from the previous manager, Union Pacific Resources Inc., in May 1998 for $5 million (Cole-Kearney Report Compendium Binder: confidential exhibit CR-114, tab A1, appendix B). Superior Incentive Trust ("Incentive Trust"), which holds the class A units of SMS, receives distributions thereon of the management fees which Superior pays to SMS pursuant to the Management Agreement. The management group of Superior (Grant Billing, Mark Schweitzer and Geoff Mackey) owns 28 percent of Incentive Trust’s units and hence is entitled to 28 percent of the distributions made by Incentive Trust. A group of investors, Enterprise Capital Management Inc. (the "Enterprise investors"), owns the remaining 72 percent of Incentive Trust’s units.

[331] The Commissioner asserts that the schedule of management fees in the Management Agreement provides incentives to SMS to increase (a) the profitability of Superior, and (b) the cash distribution to unitholders of the Superior Income Fund ("cash distribution") which owns Superior. The schedule provides no entitlement to SMS when the cash distribution per unit is less than $1.27. For cash distributions between $1.27 and $1.45, SMS is entitled to an amount equal to 15 percent of those cash distributions and to 25 percent when the cash distribution per unit is between $1.45 and $1.89. Above $1.89, SMS receives an amount equal to 50 percent of the cash distributions.

[332] Accordingly, if the management group could achieve efficiencies that resulted in increased cash distributions, SMS would be entitled to the management fees in respect of such efficiency-based cash distributions. Assuming that the management group achieves the $40 million of efficiencies claimed in the Cole-Kearney report, the Commissioner estimates that SMS would receive management fees in respect thereof of approximately $7.5 million per annum. This amount is an average based on differing assumptions about Superior's future tax position given that management fees are a tax-deductible expense.

[333] In summary, the Commissioner asserts that the management fees arising from achieving efficiencies attributed to the instant merger are payments that compensate SMS for providing the additional management services that are required to achieve these efficiencies. Viewed in this light, these fees are a cost of achieving the efficiencies and should therefore be deducted from the $40 million per annum of efficiencies claimed by the respondents. The Commissioner submits that the full amount of these fees should be deducted, not just the 28 percent thereof that would be distributable to the management group, because the Enterprise investors have management obligations and involvement through representation on Superior's or ICG's boards.

[334] The respondents offer several objections (expert reply affidavit of S. Cole, C. O'Leary, J.P. Tuttle, and E. Fergin (5 October 1999): confidential exhibit CR-113 at 9-13), the main one being that the fees do not call forth additional management efforts by the management group because the managers were fully engaged prior to the merger and because there will be no material change in the level of services provided by the managers; hence, no increase in economic costs will arise (*ibid.* at 10). As a result, the respondents argue that no deduction of the fees against claimed efficiencies is warranted.

[335] The respondents indicate that the managers received interest-free, non-recourse loans from the Enterprise investors in order to facilitate the purchase of their 28 percent share in the Management Agreement (confidential exhibit CR-113, appendix B at 56).

[336] It appears to the Tribunal that the respondents' position is that the managers are being paid more for providing the same amount of management services and hence that the fees they receive in the form of distributions from Incentive Trust are a pecuniary cost only. In simpler terms, the Management Agreement redistributes some of Superior's profit to the managers at the expense of Superior's owners since no additional management effort is provided. If the respondents' view is correct, the Tribunal finds it a strange argument to make, as it amounts to a statement that, in effect, the management group will be overpaid for the services they provide.

[337] The respondents further argue that the Management Agreement is an investment made and paid for by the managers and that the payments they receive from Incentive Trust are distributions of profit rather than compensation for management services. They point out that the owners of the Management Agreement have the right to sell their interests therein. They also submit that since the Management Agreement predates the merger and has not been amended in this respect, the level of management services to be provided has not changed since 1996 when the terms of the agreement were established. Hence, the respondents argue that any change in payment must be a pecuniary transfer (confidential exhibit CR-113 at 11, 12).

[338] The Tribunal does not agree that the Management Agreement is solely an investment, although it may have aspects thereof. In view of the fact that the management fees paid to SMS pursuant to the Management Agreement are tax-deductible expenses to Superior, they cannot be distributions of after-tax profits. While the managers purchased for their interests in the Management Agreement supported in part by interest-free non-recourse loans, the Tribunal finds that the acquisition price they paid only provides further incentive to them to supply additional services that increase their remuneration. Moreover, it appears to the Tribunal that the managers' ability to transfer their interests in the Management Agreement is highly circumscribed by section 6.1 of the Unitholders Agreement (confidential exhibit CR-113, appendix G, tab 3).

[339] The Tribunal observes that managers of for-profit enterprises often receive compensation in the form of investments or investment-related vehicles, such as shares of the managed company, stock options on company shares, low-interest loans to acquire shares of the managed company, etc. Although the payments that they receive from these investments may be in the form of dividends or capital gains, these forms of managerial compensation are nonetheless techniques for improving the quality and quantity of managerial effort. In particular, these methods seek to align the interests of managers with those of owners so that managerial decisions benefit the latter group. Thus, even when the incentive payments are in the form of distributions on company securities held by the managers, their purpose is to provide incentive to managers to achieve corporate goals and those payments are properly viewed as compensation for effort.

[340] The Tribunal agrees with the Commissioner that, in all relevant respects, the Management Agreement provides additional compensation to the managers for supplying additional managerial effort. Thus, these additional management fees are a true economic cost of achieving the efficiencies claimed by the respondents and hence are properly deducted from those efficiencies.

[341] However, the Tribunal disagrees with the Commissioner regarding the appropriate amount of that deduction. The proper quantum is that amount that compensates the managers for additional effort and hence must be less than the total fees paid to SMS under the Management Agreement because 72 percent thereof accrues to the Enterprise investors. There is no evidence that Enterprise investors or their board representative are or will be involved in active management or in achieving the claimed efficiencies. Accordingly, they benefit from the additional efforts provided by the management group but supply none themselves.

[342] The Tribunal views the distributions on SMS's class A units by Incentive Trust to the Enterprise investors as a pecuniary redistribution of Superior's pre-tax profit from Superior's owners, particularly because those owners receive nothing from the Enterprise investors when the Management Agreement changed hands.

[343] The respondents calculate the payments to the managers under the Management Agreement under different assumptions about Superior's future tax position and conclude that the managers will receive between \$1.5 million and \$2.8 million per annum if \$40 million of efficiencies are properly claimed and achieved. Following the Commissioner's approach, the Tribunal adopts the average thereof, \$2.2 million as the deduction from the claimed efficiencies (confidential exhibit CR-113 at 13 and appendix B at B1).

[344] The Tribunal notes that the $7.5 million deduction claimed by the Commissioner is the Commissioner's estimate of the management fees payable to SMS in respect of this merger when the efficiency gains are $40 million per year. Since the Commissioner asserts that this amount is itself overstated for a variety of reasons, the amount of the management fees and hence any deduction in respect thereof must necessarily be lower if the Commissioner's assertion is correct.

[345] The Tribunal notes further that the Commissioner's amount of $7.5 million average estimated management fees equals 18.75 percent of the $40 million claimed efficiency gain. The $2.2 million average fees resulting from the respondents' calculations are 5.5 percent of those efficiencies. Since the Tribunal agrees with the respondents as to exclusion of amounts received by the Enterprise investors, in determining the proper amount to deduct when efficiencies are less than $40 million, the Tribunal will use the latter percentage.

(b) Procurement

[346] The Cole-Kearney report indicates that suppliers to the merged company will experience cost savings as a result of the combination of purchasing activities in one company rather than two. The merged company will be able to demonstrate these savings and negotiate discounts in truck freight and rail freight rates, among other areas (confidential exhibit CR-112, tab A9 at 115). The Cole-Kearney report had claimed approximately $2.84 million per year in savings to the merged company, but revised its estimate to $3.28 million per year in reply to the report prepared by the Commissioner's experts in rebuttal to include cost savings at Superior's transportation affiliate, Energy Transportation Incorporated (confidential exhibit CR-114, tab 6).

[347] The Commissioner submits that the procurement savings of $3.28 million per year are largely pecuniary and not well documented. Indeed, in their report in rebuttal, the Commissioner's experts, Professors Schwindt and Globerman and Mr. Kemp, note that the estimates are based solely on A.T. Kearney's experience in negotiating transportation contracts for other clients (confidential exhibit CA-3131 at 19).

[348] The Tribunal finds that there is insufficient evidence to support the claimed savings in the Cole-Kearney report. The Tribunal accepts the Commissioner's criticisms and consequently concludes that no savings have been established.

(c) Public Company Costs

[349] The respondents claim an annual saving due to the merger of $660,000 in avoided public company costs. Such avoided costs include stock exchange listing fees, costs of outside directors, trustee's fees, regulatory filing costs, legal and audit fees, etc. Absent the merger, the respondents argue that ICG would have gone public and incurred these costs (confidential exhibit CR-112, tab A-8 at 111).

[350] The Commissioner's experts criticize these savings on the basis that ICG could plausibly have been acquired by another company and could have avoided these costs. As a result, they argue that the cost savings are not properly attributed to the instant merger (confidential exhibit CA-3131 at 18).

[351] The evidence of witness Henry Roberts, vice-president of Petro-Canada, is that arrangements had already been put in place to take ICG public through an offering of trust units when Superior made its offer to acquire ICG; ICG had already issued a preliminary prospectus and was promoting the offering via road shows. According to Mr. Roberts, Petro-Canada had received expressions of interest by a few potential buyers and had discussions with them; however, no such buyer made a binding offer to purchase ICG.

[352] History aside, will these savings likely be attained if the Tribunal orders total divestiture. At the present time, the Tribunal does not and cannot know how the ordered divestiture would take place. However, since Superior is claiming the savings in public company costs as efficiencies, it has the burden of demonstrating to the satisfaction of the Tribunal that those savings are properly included in the analysis under subsection 96(1). Thus, Superior must establish that it would or would likely take ICG public in the event of a total divestiture order. It has not done so, and the efficiency claim is therefore denied.

(2) Field Operations

(a) Fleet and Driver Reductions

[353] The Cole-Kearney report estimates that the merged entity will require fewer trucks of all types in the overlapping trade areas of the merging firms, so that a number of trucks and related delivery driver positions in overlapping areas can, therefore, be eliminated. The efficiencies in these categories arise from the elimination of certain planned vehicle purchases, the elimination of the operating costs on vehicles removed from service, proceeds of disposal of certain delivery vehicles (confidential exhibit CR-112, section C, tab C4), and the savings in driver remuneration (*ibid.*, tab C-5).

[354] The Cole-Kearney report uses statistical regression methods (as subsequently presented during the hearing in confidential exhibit CR-113, appendix G, tab 5) to determine the relationship between operating hours per bulk truck and three determinants thereof, a trade area proxy measure of distance travelled, volumes delivered, and number of calls. Based on this statistical analysis (Predictive Regression Model Results: exhibit A-3122 at 2), a reduction of 13.27 percent in operating hours was found to be achievable. With this relationship, they conclude that the merged firm will require 661 trucks of all types and that 80 trucks (75 bulk trucks and 5 cylinder trucks) currently serving the overlapping trade areas of the merging parties can be eliminated (confidential exhibit CR-112, tab C4 at 236, 237). Correspondingly, 80 fewer delivery drivers would be needed (*ibid*., tab C5 at 244).

[355] As a result of this analysis, the Cole-Kearney report estimates annualized savings of $2.6 million ($33.4 million over 10 years) through the elimination of these trucks, and annualized savings of $3.9 million ($36.3 million over 10 years) through eliminating delivery driver positions (confidential exhibit CR-112 at 18). These cost savings account for approximately 17 percent of the ten-year, total gains in efficiency claimed by the Cole-Kearney report.

[356] The Commissioner’s experts, Professors Schwindt and Globerman, have criticized the methodology used by the Cole-Kearney report to predict the fleet and driver position reduction and the results therefrom (Evaluation of Appendix D of the Cole/Kearney Reply: exhibit A-3132). They note that the key variable for assessing savings is the average distance between customers, which is not measured by the Cole-Kearney report's trade area proxy. Moreover, they point out that while the Cole-Kearney report measures the relationship between operating hours per bulk truck in their sample and three determinants thereof including volume, their measure of that volume is total branch volume (including volumes delivered by cylinder trucks) rather than actual volumes delivered by those bulk trucks. Other problems include a poor statistical "goodness of fit" measure which the Commissioner's experts were able to improve on by using a different model.

[357] The Commissioner's experts recalculated the analysis of the Cole-Kearney report with the correct data and concluded that the estimated reduction in operating hours was 3.62 percent (exhibit A-3132, table A-4) versus the estimate of 13.27 percent in the Cole-Kearney report. Accordingly, 30 trucks (28 bulk trucks and 2 cylinder trucks) could be eliminated as compared with the estimate of 80 in the Cole-Kearney report. On this basis, the Commissioner submits that cost savings will be $1.69 million per year less than the annualized estimate in the Cole-Kearney report.

[358] Professors Schwindt and Globerman and Mr. Kemp note that since the truck reduction estimate in the Cole-Kearney report is too high, so accordingly is its estimated reduction in the number of delivery drivers (confidential exhibit A-3131 at 7). Assuming cost savings of $48,500 per driver (confidential exhibit CR-112 at 246) eliminated, the overstatement by 50 trucks means that Cole-Kearney's annualized cost savings from delivery driver elimination should be reduced by $2.43 million (i.e., 50 x $48,500). The Tribunal notes that the Commissioner's approach fails to consider the reduction in one-time severance costs that would result from terminating fewer drivers.

[359] In response, the respondents emphasize that the Commissioner's experts, Professors Schwindt and Globerman, have no experience in the propane business and have never adjusted distribution routes or implemented a merger of this type.

[360] In claiming a reduction of 28 bulk trucks in overlapping areas, the Commissioner's experts advocate a reduction of only 5.8 percent of the combined 481 bulk vehicles over 10 years, as compared with Cole-Kearney's estimated 15.6 percent reduction. In claiming a reduction of two cylinder trucks in overlapping areas, they advocate a 4.4 percent reduction over 10 years in the 45-vehicle cylinder fleet, as compared with Cole-Kearney's estimate of 11.1 percent.

[361] The Tribunal cannot endorse the truck reduction estimates of the Commissioner's experts. Although they have demonstrated that the Cole-Kearney's approach to estimating truck reductions is flawed by a serious data problem, the Tribunal recognizes that some gains in efficiency are likely to result from truck reduction, especially in light of the overlapping routes of the merging parties. In the Tribunal's view, the truck reductions estimated by the Commissioner's experts are, at best, the bare minimum of what might be achievable. Accordingly, the Tribunal is of the view that the Commissioner's claimed reduction of $1.69 million in Cole-Kearney's estimated savings from truck reductions is likely too high.

[362] The Tribunal believes that $1 million per year is a more realistic estimate of the savings from bulk truck reductions than the $770,000 calculated by the Commissioner's experts; a similar adjustment to their cylinder truck savings yields approximate annual savings of $150,000. With total estimated annual savings of $1.15 million, the Tribunal believes that Cole-Kearney's estimated annualized savings should be reduced by $1.43 million rather than by the Commissioner's figure of $1.69 million.

[363] Applying the same percentage adjustment to savings in delivery drivers, the Tribunal believes that the savings will be approximately $1.9 million, rather than the $1.46 million claimed by the Commissioner. Accordingly, the Cole-Kearney's estimate of savings of $3.88 million per year should be reduced by $1.98 million, rather than by the Commissioner's figure of $2.43 million.

(b) Propane Supply and Transport

[364] The Commissioner submits that Cole-Kearney's estimated cost savings of $1.39 million per year in this category are overstated. The Commissioner claims that cost savings due to bringing idle equipment into use rather than continue purchasing transport from independent haulers are pecuniary (i.e., that the idle capacity will be transferred from the merged entity to the private haulers that were formerly used). The Commissioner also submits that the savings attributed to reduction in the backup rail car fleet have not been established.

[365] The respondents do not challenge the Commissioner's submissions, except to point out an apparent difference in amounts claimed between the text of the Commissioner's memorandum at page 222 and the corresponding data in table E2. According to the Commissioner, the text error is typographical and the data in table E2 are correct.

[366] On this basis, the Tribunal accepts the Commissioner's criticisms of Cole-Kearney's cost savings.

(3) Other

(a) One-Time Items

[367] The Commissioner states that Cole-Kearney's "annual claimed savings" of $38.51 million are overly optimistic, unrealistic and exaggerated. The Commissioner claims that this figure should be reduced by $17.3 million to produce annual estimated savings of $21.21 million, a figure that would still be too high for lack of a contingency factor.

[368] The Cole-Kearney report claims cost savings of $400.8 million over 10 years with a contingency factor of approximately five percent, for a range of $381 million to $421 million. Thus, on an annual basis, claimed savings are approximately $40 million, the midpoint of the range of $38 million to $42 million, for 10 years.

[369] It appears to the Tribunal that table E2 in the Commissioner's memorandum lists and aggregates Cole-Kearney's "annualized savings" and rounds such items and their sum to two decimals; hence the Commissioner's figure of $38.51 million per year omits one-time expenditures and receipts. Accordingly, the Commissioner's estimate of $21.21 million in annual cost savings from the merger does not include the one-time costs and receipts that result from achieving efficiencies.

[370] In final argument, the Commissioner defended this exclusion in table E2 on the basis that it would be arbitrary to express any one-time cost or receipt as an annual amount by dividing by 10 years in order to add it to the recurring amounts. Indeed, dividing by any other number of years would be equally arbitrary. The Tribunal agrees that it is arbitrary to express a one-time cost or receipt as an annual amount over 10 years. However, the Tribunal does not agree that excluding these one-time amounts is appropriate.

[371] In the Tribunal’s view, the appropriate way to value all costs and receipts resulting from the merger, whether one-time or recurring, is through discounting the cashflows at the time of disbursement or receipt at an appropriate discount rate to a present value. Cole-Kearney did this in calculating the efficiency net present value discussed above. The Commissioner did not question the methodology or the results of that calculation or offer corresponding calculations. Moreover, it appears to the Tribunal that the respondents abandoned this approach by the time the hearing started:

> DR. SCHWARTZ: No, I don’t. I thought you had discounting in your report.
>
> MR. COLE: Yes. In the original report the $40 million, or the $39 million, and the $400 million are nominal dollars, and in all our discussions with you we have used that paradigm. So while here in Calgary, we have not discussed discounted dollars or net present values.
>
> In our original report there is discussion of that, if need be, but we have not discussed it with you here today or yesterday.
>
> transcript at 34:6863, 6864 (8 December 1999).

[372] Absent this approach, the Tribunal adopts as the basis for its consideration of cost savings the respondents’ estimate of $400.8 million in total cost savings over 10 years or $40 million per annum, rather than $38.51 million per annum in annualized savings. This is done to recognize the one-time costs and receipts, although the Tribunal is well aware that a one-time cash receipt is more valuable the earlier it is received, while a one-time cost is more valuable the later the disbursement is made.

(b) Miscellaneous

[373] The Commissioner submits that the Cole-Kearney cost savings in several other areas are overstated by approximately $620,000 per year in aggregate. The respondents do not challenge the Commissioner’s submissions. On this basis, the Tribunal accepts the Commissioner’s claims in these areas.

(c) Property Tax

[374] The respondents claim that property tax payments saved by the merger are savings in user-based payments for local services that will not be needed after the merger and hence represent real savings to the municipalities. They say that the local property tax differs from income taxes in this respect. However, they also appear to recognize that not all of the municipal services supported by the property tax payments will be reduced. They claim that, absent a principled way to determine which resources will be saved, the full amount of property tax savings should be viewed as gains in efficiency.

[375] The MEG’s, cited above at paragraph [57], refer to merger-based tax savings as redistribution of income from taxpayers to firms; hence tax-savings are pecuniary gains rather than true cost savings. The MEG’s at paragraph 5.3 do not distinguish between income taxes and other taxes. At the local level, many services supported by the property tax will not be reduced by the merger (e.g., local spending on education, health, social assistance, road maintenance, councillors' salaries).

[376] At the hearing, the Tribunal suggested a principled way of distinguishing between pecuniary and real savings in the area of local services and taxes. If the firm receives an invoice for products or services provided by local government (e.g., the water bill from the local authority) and if the merged entity will use less of that product or service, then the savings are appropriately regarded as resource savings. Where it is not possible to determine whether property tax savings represent real resource savings or a pecuniary redistribution, the Tribunal agrees with the Commissioner that no claimed efficiency savings should be allowed. However, in this case, as the amount claimed by the respondents is relatively small, the Commissioner does not seek to reduce the efficiencies by that amount.

(d) Integration Costs

[377] The Commissioner submits that the costs of the Cole-Kearney report should be deducted from claimed efficiencies as should the costs of management in planning the merger. The respondents dispute this submission regarding the Cole-Kearney report on the basis that the cost of retaining the consultants was incurred to satisfy the Commissioner.

[378] In the Tribunal's view, the costs of the Cole-Kearney report and pre-merger planning costs should not be deducted from claimed efficiencies. The reason is that these costs have already been incurred and do not depend on whether the merger is allowed to proceed or on whether the efficiencies will be achieved. These costs are sunk costs and hence differ from the costs (e.g., severance payments) that will only be incurred as a result of implementing the merger. Thus, as an economic matter, it would be appropriate to deduct the consultants' fees only, for example, if they were contingent on the outcome of the instant hearing, for in such case they would not be sunk.

[379] In any event, on the evidence before us, the Cole-Kearney consultants were only retained by the respondents after the December 1998 merger. Hence, it cannot be said that the costs of the Cole-Kearney report are costs which relate to the planning of the merger by management.

(4) Net Efficiencies

[380] As noted at paragraph [372], the Tribunal includes one-time items in its analysis and, therefore, accepts $40 million per annum as the starting point to assess efficiency claims. In view of our findings and conclusions regarding the Commissioner's criticisms of the Cole-Kearney report, we conclude that the efficiencies and deductions therefrom are as follows:

TABLE 1: Deductions in Efficiencies

		Sought by Commissioner	Allowed by Tribunal
		($million/year)	
	Deductions		
	i) one-time items	$1.50	$0.00
	ii) procurement	$3.28	$3.28
	iii) public company costs	$0.66	$0.66
	iv) delivery fleet	$1.69	$1.43
	v) delivery drivers	$2.43	$1.98
	vi) propane supply	$1.12	$1.12
	vii) other (excl. management fees)	$0.62	$0.62
(a)	Total deductions before management fees	$11.30	$9.09
(b)	Gross efficiencies claimed by respondents	$40.00	$40.00
(c)	Net efficiencies before management fees (b-a)	$28.70	$30.91
(d)	Deduction regarding management fees	$7.50	$1.70 *
(e)	Net efficiencies (c-d)	$21.20	$29.21

* 5.5 % of $30.91

[381] Apart from the specific adjustments to the gains in efficiency claimed in the Cole-Kearney report, the Commissioner states that even after reducing the efficiency gains to $21.2 million, that figure is still unrealistically high, in part because it allows for no contingency factor. The Commissioner submits that the Tribunal should keep this overstatement in mind when balancing claimed efficiencies against the anti-competitive effects of the merger.

[382] The Cole-Kearney report does not contain a deduction from claimed aggregate efficiency gains as a provision for the possibility that those gains may not be achieved. In this sense, there is no provision for contingency. Mr. Cole testified that the efficiency gains were estimated conservatively and were expressed in aggregate with a margin of approximately five percent. He also stated that, as described in the Cole-Kearney report (confidential exhibit CR-112, appendix 5), between $12 to $ 21 million of efficiency gains over 10 years were excluded because they could not be quantified precisely (transcript at 33: 6365-67 (7 December 1999)). The Tribunal is satisfied that there is a buffer zone around the estimated efficiency gains and is, therefore, of the view that the absence of an explicit contingency provision is immaterial.

[383] In this case, the Commissioner chose not to lead evidence on efficiency gains and, therefore, was limited to rebutting the expert opinion evidence of Cole-Kearney. On its view of the evidence concerning the respondents' efficiencies, the Tribunal is satisfied that these efficiencies of $29.2 million per year will likely be brought about by the merger.

D. LEGAL ANALYSIS

(1) Section 96 of the Act

[384] Section 96 provides that:

> 96.(1) *The Tribunal shall not make an order under section 92* if it finds that the merger or proposed merger in respect of which the application is made has brought about or is *likely to bring about gains in efficiency* that will be *greater than*, and will *offset, the effects of any prevention or lessening of competition* that will result or is likely to result from the merger or proposed merger and that the gains in efficiency *would not likely be attained if the order were made.*
>
> (2) In considering whether a merger or proposed merger is likely to bring about gains in efficiency described in subsection (1), the Tribunal shall consider whether such gains will result in
> *(a)* a significant increase in the real value of exports; or
> *(b)* a significant substitution of domestic products for imported products.
>
> (3) For the purposes of this section, the Tribunal shall not find that a merger or proposed merger has brought about or is likely to bring about gains in efficiency by reason only of a redistribution of income between two or more persons.
> (emphasis added)

[385] Section 96 states, in unequivocal terms, that the Tribunal is not to make an order under section 92 if efficiency gains are greater than and offset the effects of any prevention or lessening of competition. As stated above, the respondents claim that significant efficiencies will result from this merger. The Commissioner, however, disputes the efficiencies claimed and further argues that section 96 is not available, as a matter of law, to the respondents in this case.

(2) Position of the Parties

(a) Commissioner

[386] The Commissioner argues that section 96 is not available, as a matter of law, in cases where a merger eliminates competition and results in the creation of a monopoly in a relevant market. Further, he submits that in assessing the trade-off analysis in section 96, the Tribunal has a statutory responsibility to exercise its judgment as to the weight to be accorded to the transfer from consumers to producers, hence that applying a standard with a fixed predetermined weight is contrary to section 96.

[387] The Commissioner suggests that the balancing weight standard as introduced by his expert, Peter G.C. Townley, is consistent with a proper interpretation of section 96. He submits that the efficiency gains do not offset the anti-competitive effects caused to the economy as a whole by this merger.

[388] The Commissioner further submits that the respondents bear the onus of demonstrating all of the elements of the efficiency defence stated in section 96.

(b) Respondents

[389] The respondents claim that significant efficiencies in the range of $40 million per annum will result from the merger between Superior and ICG. They argue that the test to be met under section 96 is that the efficiencies must offset any substantial lessening of competition. They further argue that a substantial lessening of competition is permitted provided it is outweighed by the efficiencies attributable to the merger. They also submit that the effects of the substantial lessening are measured by the deadweight loss to the economy and exclude wealth transfers between producers and consumers which are neutral to the economy.

[390] Further, the respondents submit that the Commissioner is distancing himself from the MEG's, cited above at paragraph [57], by adopting a "distributional weights" approach articulated by his expert, Professor Townley. The respondents submit that the efficiencies will not be realized in the absence of the merger and that there is no evidence of any existing alternative proposals which could reasonably be expected to generate these efficiencies if a divestiture order were made under section 92.

[391] With respect to the burden of proof, they argue that the Commissioner has not met his burden of establishing the effects of the substantial lessening of competition and that the efficiencies might be achievable in some other way.

(3) Status of the MEG's

[392] The parties referred to the MEG's, cited above at paragraph [57], in their written submissions and in oral argument.

[393] Although the Tribunal and the Federal Court of Appeal have held in *Director of Investigation and Research v. Tele-Direct* (1997), 73 C.P.R. (3d) 1 (Comp. Trib.) at 37 and in *Director of Investigation and Research v. Southam Inc.* (1995), 63 C.P.R. (3d) 1 (FCA) at 41, that the MEG's are not sacrosanct nor legally binding, the Tribunal notes that they provide important enforcement guidelines reflecting the Commissioner's view on how the Act should be interpreted. The MEG's, which were published in 1991, were prepared to inform the business community and the public as to how the Competition Bureau analyzes the competitive impact of mergers including how it considers efficiencies.

[394] The Tribunal takes notes that, since their adoption in 1991, no changes as to the interpretation of section 96 have been made to the MEG's. Indeed, even after the issuance of the decision in *Hillsdown*, cited above at paragraph [127], where Reed J. questioned whether the wealth transfer should be treated as neutral, the Commissioner continued, without amending his position, to apply the MEG's. Howard Wetston, the Director of Investigation and Research at the time, stated that he saw no need to revise the guidelines as the comment made by Reed J. in the *Hillsdown* decision was in *obiter dictum.*

[395] The total surplus standard was reiterated on July 14, 1998 with the publication of The Merger *Enforcement Guidelines as Applied to a Bank Merger* by the Competition Bureau at paragraph 109, online: Industry Canada < http://strategis.ic.gc.ca/SSG/ct01280e.html > (last modified: 5 July 1998):

> Where a merger results in a price increase, it brings about both a neutral redistribution effect and a negative resource allocation effect on the sum of producer and consumer surplus (total surplus) within Canada. Ordinarily, the Director measures the efficiency gains described above against the latter effect, i.e., the deadweight loss to the Canadian economy. (reference omitted)

[396] It is only after the Commissioner decided to file the application against the respondents in this case that changes to his position became apparent. Indeed, two recent speeches by Gwillym Allen, Assistant Deputy Commissioner of Competition, Economics and International Affairs, demonstrate a change in the Commissioner's interpretation of the efficiencies exception. In these speeches, Mr. Allen suggests that in some cases "it is more appropriate for the Competition Tribunal to determine whether the merger increases aggregate welfare or not" ("The treatment of Efficiencies in Merger Analysis": remarks given at "Meet the Competition Bureau" conference, Toronto, 3 May 1999) and that "given the evidence presented in a particular merger case, total surplus may not be an all-inclusive measure of the anticompetitive effects that are likely to arise from the merger". Hence, "other qualitative and quantitative subjective comparisons need to be performed in order to determine if the efficiency gains offset the anticompetitive effects" ("The Enforcement of the Efficiency Exception in Canadian Merger Cases": remarks given to the Competition Law Group, Stikeman Elliott, Barristers and Solicitors, Toronto, 25 June 1999).

[397] This change in position is quite surprising. It must not be forgotten that the point of view put forward in the MEG's represents the considered opinion of the Commissioner, the official appointed by the Governor in Council to administer and enforce the Act. That view, it goes without saying, is the view arrived at by the Commissioner following careful advice given to him by his legal and economic advisers regarding the meaning of the various provisions of the Act. Although the Commissioner is not bound by the MEG's nor are they binding upon this Tribunal, the MEG's should be given very serious consideration by this Tribunal. Needless to say the Tribunal can disagree and in fact should disagree if it is of the opinion that the interpretation proposed in the MEG's is wrong. However, when referring and considering the MEG's, one should bear in mind the comments in the preface to the MEG's made by Howard Wetston, then Director of Investigation and Research. He stated that the Merger Guidelines were published to promote a better understanding of the Director's merger enforcement policy and to facilitate business planning. He also noted the extensive consultation process which was followed in their preparation.

(4) Efficiency "Exception"

[398] The Commissioner submits that section 96 provides *a defence* to an otherwise anti-competitive merger to the respondents if they can demonstrate that the efficiency gains from the merger will be greater than and will offset the effects of any prevention or lessening of competition resulting from the merger. The respondents, on the other hand, argue that section 96 constitutes rather a limitation on the Tribunal's jurisdiction to make an order under section 92.

[399] In *Director of Investigation and Research v. Canadian Pacific Ltd*. (1997), 74 C.P.R. (3d) 55 at 63, [1997] C.C.T.D. No. 7 (QL), the Tribunal held that section 96 was a defence available to the respondents. The Tribunal further held that the onus of alleging and proving the material facts which form the basis of the defence fell upon the respondents:

> In my view, the Director's request for particulars is reasonable. Under the Act, the existence of efficiencies essentially constitutes *a defence* to the Director's application. Just as it is improper for the Director to plead bald allegations without pleading the material facts upon which he relies, so too must the respondents plead the material facts which form the basis of a "defence" of efficiency gains.
> (emphasis added)

The Tribunal can see no reason to disagree with the above statement.

(5) Burden of Proof

(a) Commissioner

[400] The Commissioner submits that the respondents bear the burden of proving all the elements of the efficiency defence on a balance of probabilities and that, once a substantial lessening competition is established pursuant to section 92, the Tribunal should proceed to make an appropriate order unless the respondents are successful with their defence under section 96. The Commissioner suggests that the respondents must bear the onus of establishing all the elements because they have the best knowledge of what strategies are available to them to generate the efficiency gains that they claim and what, if any, alternate means would or would not be available to achieve those gains. Further, the Commissioner submits that the section 11 powers provided by the Act do not place the Commissioner in a position as knowledgeable as the respondents about their business strategies. In support of his argument, the Commissioner relies on two Tribunal decisions: *Director of Investigation and Research v. Canadian Pacific Ltd.*, cited above at paragraph [399], at page 63, and Hillsdown, cited above at paragraph [127], at pages 332-34, where the Tribunal recognized that the burden of proving the elements of the "efficiency defence" falls on the respondents.

[401] The Commissioner also asserts that the respondents must show not only the likely efficiency gains but must also demonstrate the scope and extent of the anti-competitive effects of the merger, absent which the Tribunal is not in a position to determine whether the gains in efficiency are greater than and offset those effects and whether "the defence" has been established.

(b) Respondents

[402] Relying on the *Hillsdown* decision, cited above at paragraph [127], the respondents submit that they bear the onus of proving the existence of the efficiencies claimed or the likelihood of their existence if the merger has not been implemented. They claim that the Commissioner bears the burden of establishing the effects of the substantial lessening of competition (i.e., the deadweight loss) and that the efficiencies might be achievable in some other way (e.g., a sale to third party). Indeed, the respondents submit that the Commissioner is in a good position, in view of his investigatory powers pursuant to section 11 of the Act, to obtain third party information.

(c) Conclusion

[403] The Tribunal is of the view that the respondents bear the burden of proving all of the elements of section 96 on a balance of probabilities, except for "the effects of any prevention or lessening of competition", which must be demonstrated by the Commissioner.

(6) Role of Efficiencies under the Act

[404] The Commissioner reminds us that section 1.1 states that the purpose of the Act is to "maintain and encourage competition in Canada" and that competition is not seen as an end in itself, but rather as a means to achieve the four objectives identified in section 1.1. The Commissioner further submits that no hierarchy is established among those "potentially conflicting" objectives. The Commissioner argues that it becomes clear when sections 96 and 1.1 are read together, that a section 96 defence will prevail only when a merger enhances the objectives of competition policy more than it diminishes them. The Commissioner argues that the Tribunal must decide whether Canadians and the Canadian economy are better off with or without the merger.

[405] The respondents submit that the Commissioner's interpretation of section 96 is wrong since section 96 is not subordinate to the purpose clause of section 1.1. Further, the respondents suggest that where there is a conflict between a purpose clause statement and a substantive provision, the latter must prevail.

[406] There are significant differences in the positions of the parties as to the proper interpretation of sections 1.1 (the purpose clause) and 96 (the efficiency exception) of the Act. Many of the issues raised are of long standing, in part because there have been so few litigated mergers in Canada since the Act was amended. In particular, no decision in a litigated merger has turned on the question of efficiency gains and hence it appears to the Tribunal that there is considerable confusion over the meaning of certain key terms. Before dealing with the positions of the parties, the Tribunal will set out its understanding of the relevant sections of the Act.

[407] The Act seeks to obtain the benefits of a competitive economy. As set out in the purpose clause, these benefits, which we have characterized as the objectives of competition policy, are economic efficiency and adaptability, the expansion of opportunities for Canadian participation in world markets and openness to foreign competition at home, opportunities for small businesses to participate in economic activity, and competitive consumer prices and product choices. Under the purpose clause, the Act seeks to achieve these objectives by maintaining and encouraging competition. To this end the Tribunal may, pursuant to section 92 of the Act, order divestiture where a merger is found to prevent or lessen competition substantially.

[408] There was some discussion at the hearing concerning the status that should be given to the stated objectives, particularly whether the ordering of objectives in the list contains any useful information in interpreting the Act. Such discussion is misdirected; the true goal specified in the purpose clause is the maintenance and encouragement of competition. It is noteworthy that the Act does not give the Tribunal the powers to achieve the objectives individually.

[409] For example, small businesses are not protected under the Act. The purpose clause indicates only that the opportunities for small businesses to participate in economic activity will result from maintaining and encouraging competition. Hence, no other powers are needed to realize this objective.

[410] Accordingly, the listing of objectives of competition policy simply presents the rationale for maintaining and encouraging competition. No hierarchy among the listed objectives is indicated and hence no meaning can be taken from the order in which the listed objectives of competition policy appear in the purpose clause. Under the purpose clause, all of the objectives flow from competition.

[411] There are, of course, other objectives that could be sought, one such being the proper distribution of income and wealth in society. It is clear, however, that when competition is maintained and encouraged, the resulting distribution of income and wealth may not be the proper one depending on one's political or social outlook. By not including distributional considerations in the list of objectives in the purpose clause, Parliament appears to have recognized this. Indeed, if distributional issues were a concern, Parliament might have felt it necessary to restrict or place limits on competition in order to achieve the proper distribution of income and wealth in society. However, such limits would place competition policy at war with itself.

[412] Turning to section 96 of the Act, the "efficiency exception", the Tribunal notes that this section contains the only provision in the Act which limits or restricts the pursuit of competition. As noted above, section 1.1 states that competition should, in and of itself, promote efficiency; normally there will be no conflict between the statutory means (encouraging competition) and the desired end (efficiency). However, the existence of section 96 makes it clear that if competition and efficiency conflict in merger review, the latter is to prevail. Thus, an anti-competitive merger that created or increased market power but also increased efficiency could be approved. Addressing this possibility, the MEG's, cited above at paragraph [57], state at paragraph 5.1:

> One such circumstance is highlighted in section 96 of the Act, where it is recognized that some mergers may be both anticompetitive and efficiency enhancing. When a balancing of the anticompetitive effects and the efficiency gains likely to result from a merger demonstrates that the Canadian economy as a whole would benefit from the merger, section 96(1) explicitly resolves the conflict between the competition and efficiency goals in favor of efficiency.

The Tribunal cannot but agree with this view of section 96.

[413] The existence of section 96 signals the importance that Parliament attached to achieving efficiency in the Canadian economy. Indeed, in the view of the Tribunal, section 96 makes efficiency the paramount objective of the merger provisions of the Act and this paramountcy means that the efficiency exception cannot be impeded by other objectives, particularly when those other objectives are not stated in the purpose clause. To be more explicit, if, pursuant to the purpose clause, the pursuit of competition is not to be limited by distributional concerns, then as a matter of both law and logic, the attainment of efficiency in merger review cannot be limited thereby when competition and efficiency conflict.

(7) Commissioner's Position that Section 96 Does Not Apply to a Merger to Monopoly

[414] The Commissioner submits, as a matter of law, that section 96 does not apply in the circumstances of a merger-to-monopoly. The Commissioner's position is based on the underlying purpose of the Act stated in section 1.1 which is to "maintain and encourage competition". He submits that when a merger creates an absolute monopoly, competition is eliminated which runs counter to the underlying purpose of the Act. Further, the Commissioner submits that when one of the effects of a merger is the creation of a monopoly, that monopoly can never be offset or "neutralized" by efficiency gains regardless of how substantial they are. The Commissioner also argues that if section 96 were intended to allow mergers that eliminate competition to be saved, Parliament would have used some very specific language to so provide.

[415] The Commissioner argues that there is a distinction to be made between sections 92 and 96 of the Act. Subsection 92(2) means that one would not be able to find that a merger, for example, substantially lessens competition simply by virtue of it being a monopoly. That subsection specifically states:

> *For the purpose of this section*, the Tribunal shall not find that a merger or proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially solely on the basis of evidence of concentration or market share. (emphasis added)

[416] According to the Commissioner, subsection 92(2) is very specific and only applies for the purposes of that particular section, hence that a substantial lessening of competition leading to a 100 percent market share constitutes an elimination of competition which is not covered by section 96. In other words, the argument is that if a merger eliminates competition, the efficiency defence contemplated in section 96 should not apply.

[417] The Commissioner conceded at the hearing that, as a matter of law, a respondent could invoke the section 96 exception as long as its market share did not attain 100 percent:

> MS STREKAF: Our submissions are that there is a different standard in the legislation that we read into the Act in Section 96 in the case of 100 percent that would not apply in your example in the case of a 96 percent situation.
>
> If you had a 96 percent market share, we would say that it would be very difficult, in those cases, for the Respondents to demonstrate that you could offset the effects of a 96 percent market share. But that's a question where we nonetheless recognize and acknowledge that in those kind of situations the Section 96 balancing needs to be performed. Our position is different for 100 percent.
>
> THE CHAIRMAN: A 98 percent market share and a 100 percent market share, the difference may simply be theoretical. Practically, it may not mean anything insofar as consumers are concerned.
>
> But you are saying, in the case of the 98 market share, they could at least attempt to have resort to 96?
>
> MS STREKAF: That's correct.

> THE CHAIRMAN: And you are saying, when they reach 100, they shouldn't be entitled to stop at the barrier and go back home.
> MS STREKAF: Yes.
>
> transcript at 41:8234, 8235 (1 February 2000).

[418] The position taken by the Commissioner cannot be right. A merger that leads to a monopoly (i.e., where a merged entity has a 100 percent market share) is not, per se, a merger in regard to which the Tribunal may make an order under section 92. Subsection 92(2) requires, in effect, the Commissioner to adduce further evidence in order to show that the merger in question prevents or lessens or is likely to prevent or lessen competition substantially.

[419] If the Tribunal concludes that the merger is likely to prevent or lessen competition substantially, it may make an order under section 92, subject to sections 94 to 96. Section 96 clearly provides that the Tribunal is not to make an order under section 92 if the gains in efficiency resulting from the merger are greater than and will offset the effects of any prevention or lessening of competition. Section 96 does not make any distinction between the "elimination" and the "substantial lessening" of competition. The section applies to any merger in respect of which the Tribunal may make an order under section 92. A merger leading to monopoly and in respect of which the Tribunal has concluded that there will be a substantial lessening of competition, is without doubt a merger to which section 96 applies.

(8) Effects of a Merger

[420] In order to decide whether the efficiencies are greater than and offset the effects of any prevention or lessening of competition under section 96, the Commissioner suggests that the Tribunal should adopt the balancing weight standard described by his expert, Professor Townley. The Commissioner submits that using predetermined weights to the transfer would, as a matter of law, be contrary to section 96. According to the Commissioner, applying a predetermined weight would constitute an abrogation by the Tribunal of its statutory responsibility to exercise judgment. Professor Townley explained the reasons why the various approaches (price standard, the consumer surplus standard and the total surplus) are not consistent with a proper interpretation of section 96. In the Commissioner's view, only the balancing weight approach is consistent with a sound interpretation of section 96.

[421] The respondents submit that the total surplus standard, as stated in the MEG's, cited above at paragraph [57], is the proper standard. They note that the Tribunal's decision in *Hillsdown,* cited above at paragraph [127], dated March 9, 1992, where Reed J. in her *obiter dictum*, questioned the appropriateness of the total surplus standard, has not led to any change to the MEG's. Indeed, at page 343, Reed J., in response to the submission made by both parties that the wealth transfer from consumers to producers was neutral, raised as a question whether the transfer is always neutral and suggested that it might be appropriate to include redistributional concerns when conducting the analysis required by subsection 96(1):

> One other consideration arises with respect to the arguments concerning the efficiency defence. The parties both rely on the judgment that the wealth transfer is a neutral one. A question posed during argument and which will be

> repeated here is: is this always so? If, for example, the merging parties in question were drug companies and the relevant product market related to a life-saving drug would economists say that the wealth transfer was neutral. The Tribunal does no more than raise this as a question. Another question respecting the alleged neutrality of the wealth transfer is: if the dominant firm which charges supra-competitive prices is foreign-owned so that all the wealth transfer leaves the country, should the transfer be considered neutral?

(a) Efficiency Effects and Redistributive Effects

[422] An anti-competitive horizontal merger is a transaction that creates or enhances market power in the merged entity, the exercise of which leads to a higher price for the same good or reduced quality therein at the same price. If competitive conditions prevailed before the merger, the exercise of market power has several effects.

[423] The economic effects of an anti-competitive merger are the effects on real resources, that is, the changes in the way the economy deploys those resources as the result of the merger. When market power results in an increase in the price of a product, allocative efficiency is reduced as consumers acquire less of the product and switch to lower-valued substitutes. Technical or productive efficiency is reduced because, with less consumption of the product, industry output falls and economic resources are diverted to the production of more costly substitute goods. A reduction in dynamic efficiencies as defined in the MEG's could also be an effect of an anti-competitive merger.

[424] Since consumers pay more for the quantity of the product at the higher price, they lose some of the surplus they had when they paid the competitive price. A portion of this loss in consumer surplus is realized by the firm and its shareholders in the form of higher profits. Such loss is not a social loss, but rather a redistribution of gains from the merger; real resource use is not affected by this transfer of income.

[425] However, the remaining loss of consumer surplus, beyond that realized by the shareholders in the form of increased profits, is a social loss and is often referred to as the "deadweight loss" because there are no offsetting gains. The lost value of output and consumption associated with the deadweight loss measures the allocative and technical inefficiency caused by the exercise of market power and represents the economic effect of the merger.

[426] As we have already stated, the Tribunal is of the view that nothing in the Act allows us to consider distributional goals in merger review. Had this been Parliament's intention, surely the Act would have been worded differently. Robert H. Bork, in his seminal work *The Anti-Trust Paradox* (New York: The Free Press, 1993), albeit in the American context, puts forward the view that income distribution and its effects are not to be considered in antitrust matters. The Tribunal agrees entirely with the following extract from pages 110 and 111:

> The model outlined addresses the total welfare of consumers as a class. It says nothing of how shares of consumption should be allocated through changes in the distribution of income. Yet all economic activity has income effects and, in particular, restriction of output by the exercise of monopoly power has income

> effects not taken into account by weighing only changes in allocative and productive efficiency. If the reader will look once more at Figure 4 he will see that at the competitive price, P1, there is a large area under the demand curve that lies above the market price. This area represents the amount above the actual price that consumers would be willing to pay rather than go without the product; it is generally called the "consumer's surplus," perhaps on some notion that the consumer gets surplus value for his money.
>
> Those who continue to buy after a monopoly is formed pay more for the same output, and that shifts income from them to the monopoly and its owners, who are also consumers. This is not dead-weight loss due to restriction of output but merely a shift in income between two classes of consumers. The consumer welfare model, which views consumers as a collectivity, does not take this income effect into account. If it did, the results of trade-off calculations would be significantly altered. As Williamson notes, referring to his diagram: "The rectangle ... bounded by *P2* and *P1* at the top and bottom respectively and o and *Q2* on the sides represents a loss of consumers' surplus (gain in monopoly profits) that the merger produces. ... Inasmuch as the income distribution which occurs is usually large relative to the size of the dead-weight loss, attaching even a slight weight to income distribution effects can sometimes influence the overall valuation significantly."
>
> The issue is not crucial, perhaps, since most antitrust cases do not involve trade-off. The law's mistake has generally consisted of seeing restriction of output where there is none, and in such cases there will be no loss of consumer surplus. But even in cases where the trade-off issue must be faced, it seems clear the income distribution effects of economic activity should be completely excluded from the determination of the antitrust legality of the activity. It may be sufficient to note that the shift in income distribution does not lessen total wealth, and a decision about it requires a choice between two groups of consumers that should be made by the legislature rather than by the judiciary. (reference omitted)

(b) Standard for Merger Review

[427] Assessing a merger’s effects in this way is generally called the "total surplus standard". As discussed by the Commissioner’s expert, Professor Townley (expert affidavit (16 August 1999): exhibit A-2081), and in a recent article by Michael Trebilcock and Ralph Winter, transfers from consumers to shareholders are not counted as losses under the total surplus standard. The anti-competitive effect of the merger is measured solely by the deadweight loss (M. Trebilcock and R. Winter, "The State of Efficiencies in Canadian Merger Policy" (1999-2000) 19:4 Canadian Competition Record 106). Under the total surplus standard, efficiencies need only exceed the deadweight loss to save an anti-competitive merger.

[428] Other standards have been proposed. Under a "price standard", efficiencies are not recognized as a justification for a merger which results in a price increase to consumers. Under a "consumer surplus standard", efficiencies can be considered in merger review only if they are sufficiently large as to prevent a price increase. Effectively, this means that transfers of income are considered as losses; hence efficiencies must exceed the sum of the transfer of income and the deadweight loss.

[429] From an economic point of view, the cost to society of an anti-competitive merger is the deadweight loss which measures lost economic resources. If, on the other hand, the merger generates efficiencies, it creates economic resources and hence the net economic effect of the merger in terms of resources may be much less than the deadweight loss. Indeed, the merger could be economically positive if efficiencies were sufficiently large, in which case society would benefit economically from allowing the merger.

[430] This possibility is the basis for considering efficiencies in merger review. It is not to determine whether shareholders will be better off at the expense of consumers, but rather whether the economy gains more resources than it loses through the transaction. For this reason, it is important to distinguish true efficiencies, those savings that enable the firm to produce the same amount with fewer inputs, from "pecuniary" economies, those savings that increase shareholder profits but do not allow the firm to be more productive. This distinction is recognized in subsection 96(3) which excludes pecuniary efficiencies from consideration. The only standard that addresses solely the effects of a merger on economic resources is the total surplus standard.

(c) Reasons for Total Surplus Standard

[431] Professor Townley offers an approach ("balancing weights") in which the members of the Tribunal are invited to use their individual judgment and discretion to evaluate whether the gains to shareholders are more or less important to society than the losses of surplus imposed on consumers by the exercise of market power. However, the members of the Tribunal are selected for their expertise and experience in order to evaluate evidence that is economic or commercial in nature, not to advance their views on the social merit of various groups in society. As noted by Iacobucci J. in the Supreme Court’s decision in *Southam*, cited above at paragraph [48], at pages 773 and 774:

> As I have already said, the Tribunal’s expertise lies in economics and in commerce. The Tribunal comprises not more than four judicial members, all of whom are judges of the Federal Court -- Trial Division, and not more than eight lay members, who are appointed on the advice of a council of persons learned in "economics, industry, commerce or public affairs". See *Competition Tribunal Act*, s.3. The preponderance of lay members reflects the judgment of Parliament that, for purposes of administering the *Competition Act*, economic or commercial expertise is more desirable and important than legal acumen.

[432] First, the Tribunal is of the view, as already stated, that distributional concerns do not fall within the ambit of the merger provisions of the Act. If Parliament had intended that transfers from consumers to shareholders be considered, it would no doubt have clearly stated this intent in the Act.

[433] Second, merger review must be predictable. Adopting Professor Townley’s approach would result in decisions that vary from case to case depending on the views of the sitting members of the Tribunal regarding the groups affected by the mergers.

[434] Third, the deadweight loss resulting from a price increase is typically quite small as Professors Trebilcock and Winter note in their article, cited above at paragraph [427]. On the other hand, as the Commissioner observes, the transfer is much larger than the deadweight loss resulting from the instant merger. This being the case, a standard that includes the transfer as an effect under subsection 96(1) would effectively result in the unavailability of the section 96 defence.

[435] Professor Ward's evidence makes this clear. Using the calculations in table 8 of his initial report (exhibit A-2059 at 34), consider a large price increase of 15 percent. The resulting deadweight loss is 1.7 percent of sales but the transfer is 11.6 percent of sales when the price-elasticity of demand is -1.5. Accordingly, a merger that offered gains in efficiency of at least 1.7 percent of sales would be approved under a total surplus standard. However, under a consumer surplus standard, the efficiency gains would have to be at least 13.3 percent of sales.

[436] When the elasticity of demand is -2.5, the deadweight loss and transfer are 2.8 percent and 9.4 percent of sales respectively. Accordingly, the total surplus standard would approve a merger if efficiency gains were at least 2.8 percent of sales. However, a consumer surplus standard would reject a merger unless efficiency gains were at least 12.2 percent of sales.

[437] In an *obiter dictum in the Hillsdown* decision, cited above at paragraph [127], Reed J. appeared to favour the consumer surplus standard. However, as the above numbers indicate, applying a consumer surplus standard would lead the Tribunal to reject many efficiency-enhancing mergers on distributional grounds. As noted above, efficiency was Parliament's paramount objective in passing the merger provisions of the Act and it intended the efficiency exception in subsection 96(1) to be given effect. Accordingly, the Tribunal is not prepared to adopt a standard that frustrates the attainment of that objective.

[438] Fourth, omitting income and wealth redistributional concerns from merger review does not mean that these concerns are to be ignored by public policy. Indeed, governments at all levels have adopted specific tax and social policy measures to address their distributional objectives. The Tribunal regards these measures as more effective ways of meeting social policy goals. Blocking efficiency-enhancing mergers to achieve the same ends is, in our view, contrary to the Act.

[439] Fifth, the MEG's, cited above at paragraph [57], endorse the total surplus standard. Although the Tribunal is not bound by these guidelines, it recognizes that they contain a substantial degree of economic expertise and it agrees with the observation at footnote 57 therein that "[w]hen a dollar is transferred from a buyer to a seller, it cannot be determined a priori who is more deserving, or in whose hands it has a greater value".

(d) Other Effects

[440] The Commissioner submits that the ordinary meaning of "effect/effet", that is, something which flows causally from something else, is the most logical to apply to interpret that language used in section 96. The parties referred to The Shorter Oxford Dictionary, 3rd ed. (Oxford: Clarendon Press, 1973) at 631, which defines "effect" as "[s]omething caused or produced; a result, consequence. Correl. w. cause." Similarly, they referred to the *Larousse de la Langue Française* (Paris: Librairie Larousse, 1979) at 605, which defines "effet" as "[c]e qui est produit, entraîné par l'action d'une chose."

[441] The Commissioner further submits that, provided the effects flow from a prevention or lessening of competition resulting from the merger, section 96 does not place any other limitations upon the scope or range of "effects" to be considered, which includes detrimental effects of a merger that will affect consumers such as an increase in prices, a decrease in service, product choice or quality.

[442] The respondents submit that the test to be met under section 96 is that the efficiencies must offset any *substantial lessening of competition*. They further argue that a substantial lessening of competition is permitted provided it is outweighed by the efficiencies attributable to the merger. They also submit that *the effects of the substantial lessening of competition* are measured by the deadweight loss to the economy and exclude wealth transfers between consumers and producers, which are neutral to the economy.

[443] The Tribunal observes that an anti-competitive merger may well have other important economic and social effects. Job terminations and plant closures are often emphasized in the press, presumably because of their immediacy and significance to the people and communities involved.

[444] While not seeking to minimize the importance of these effects on those affected, the Tribunal wishes to point out that they are not restricted to anti-competitive mergers. Layoffs and closures often result from mergers and business restructurings that are not offensive and the Commissioner may take no notice thereof under the Act. Accordingly, the Tribunal is of the view that these effects are not to be considered when they result from anti-competitive mergers.

[445] As a result, the Tribunal cannot accept the Commissioner's submission that section 96 does not place any other limitations upon the scope or range of "effects" to be considered.

(e) Conclusion

[446] In final argument, the Commissioner refers to the "anti-competitive effects" of the merger as including the redistributive effects of the transfer. The Tribunal does not regard the redistributive effects of a merger as anti-competitive.

[447] The Tribunal further believes that the only effects that can be considered under subsection 96(1) are the effects on resource allocation, as measured in principle by the deadweight loss which takes both quantitative and qualitative effects into account. Accordingly, the Tribunal believes that the total surplus standard is the correct approach for analysing the effects of a merger under subsection 96(1).

[448] As a practical matter, the effects of an anti-competitive merger include effects that are difficult to quantify and may not be captured through statistical estimation of the deadweight loss. Subsection 96(1) specifically provides that gains in efficiency must both be greater than and offset the effects of any lessening of competition. Thus, it may be that, in a strict quantitative comparison of efficiencies and the estimated deadweight loss, the former exceeds the latter, yet the requirement to be "greater than" may not be met because of unmeasured qualitative effects.

[449] If the word "offset" (or in French, "neutraliseront") were taken to mean "prevent" or "neutralize", this would imply that efficiency gains had to prevent the estimated deadweight loss and the other effects of prevention or lessening of competition from occurring or to neutralize these effects. Such interpretation would be inconsistent with the existence of the efficiency exception which clearly allows such effects. The Commissioner submits that "offset" (in French, "neutraliseront") must be interpreted to mean "compensate for" rather than "prevent" or "neutralize". The Tribunal agrees with this submission.

[450] Whether, in a given case, the efficiency gains "offset" the effects of any prevention or lessening is a matter which the Tribunal must assess and decide in light of the available evidence. However, the requirement to "offset" cannot be used to justify consideration of qualitative or other effects which are not open for consideration under the Act.

(9) Deadweight Loss

[451] In final argument, the Commissioner presented several estimates of deadweight loss, the transfer, and the balancing weights resulting from the calculations undertaken to apply Professor Townley's approach. Certain of these estimates were based on information provided in final argument that was excluded. Moreover, since the total surplus standard is, in our view, the correct standard to use in the trade-off analysis under subsection 96(1), the Tribunal will discuss only the deadweight loss estimate calculated from properly introduced information.

[452] The Commissioner adopts the approach presented in evidence by Professor Ward, whose expert report (exhibit A-2059) provides at table 8, on page 34, estimates of deadweight loss and consumer surplus transfer as percentages of initial sales under various assumed values of the price elasticity of demand. In that table, Professor Ward presents those percentage estimates for each of three values of the elasticity between -1.5 and -2.5 only, because at the time of his initial report, he did not have the evidence of Professors Plourde and Ryan that showed that demand for propane was inelastic and hence could not have a price-elasticity of less than -1.0.

[453] The Commissioner adopts Professor Ward's estimated price increases shown at table 2 on page 8 of his affidavit in reply (confidential exhibit CA-2060) for the residential, industrial, and automotive end-use segments of 11.7 percent, 7.7 percent and 8.7 percent respectively, and reduces each by 0.7 percent to take account of the pass-through of cost savings. Professor Ward obtained his estimates after the results of Professors Plourde and Ryan became available and, accordingly, he assumed an elasticity of -1.0 in obtaining those estimates. Since Professor Ward was not able to estimate the price increase for his "other" segment, the Commissioner adopts seven percent as appropriate for that segment because it was the smallest increase that Professor Ward found.

[454] The Commissioner presents estimates of 1998 combined sales of the merging companies in each of those segments: $94 million, $239 million, $139 million, and $113 million respectively, accounting for the combined total volumes sold by Superior and ICG. Thus, the Commissioner's segmented sales estimates are for combined total sales, not just the combined sales of the merging parties in overlapping areas. Since, according to Professor Ward's table, the deadweight loss varies directly with sales, the Commissioner's estimates thereof likely overstate the deadweight losses by segment in overlapping areas.

[455] The Commissioner obtains estimates of deadweight loss by segment by taking the segment sales and price increase information and applying them to Professor Ward's table where the assumed demand elasticity is -1.5. The resulting deadweight loss estimates based on 1998 sales data are as follows:

residential	$0.8 million
industrial	$1.0 million
automotive	$0.7 million
other	$0.5 million
total	$3.0 million

[456] The respondents point out that the estimates of deadweight loss would be lower had they been calculated at an industry demand of -1.0, as suggested by the work of Professors Plourde and Ryan. They also note the inconsistency in calculating deadweight losses assuming an elasticity of demand of -1.5 while using price increases estimated with an elasticity of demand of -1.0.

[457] The Commissioner submitted in final argument Table R1 which calculates the deadweight loss assuming a nine percent price increase across all segments in overlapping markets and a price elasticity of demand of -1.0. The resulting estimate of deadweight loss is $3.43 million, although the sales revenue figure used ($572 million) was among the materials submitted in final argument that were excluded.

[458] Even though it is probably overstated, the Tribunal is prepared to accept the deadweight loss estimate of $3.0 million put forward by the Commissioner, since the overstatement is inconsequential in view of our finding that the merger is likely to bring about gains in efficiency in the order of $29.2 million.

(10) Trade-off Analysis

[459] Pursuant to subsection 96(1), the Tribunal must ask whether the gains in efficiency exceed and offset the effects of any prevention or lessening of competition that the merger has brought about or is likely to bring about. The Tribunal observes that while the gains in efficiency claimed by the respondents have been measured and reduced to dollar figures, efficiency gains could also include qualitative elements such as, for example, better service and higher quality. No evidence of qualitative efficiency gains has been produced.

[460] Similarly, the effects of any lessening of competition can also have both measurable and qualitative elements. The estimated value of the deadweight loss, while measuring the effect of the higher price on resource allocation, may not capture lessening of service or quality reduction.

[461] For greater certainty, the Tribunal is of the view that all of the gains in efficiency must be compared with all of the effects of any prevention or lessening of competition, even though this requires judgment when combining measured gains (effects) with qualitative gains (effects).

[462] The Commissioner submits that subsection 96(1) requires the Tribunal to consider whether the efficiency gains would likely be realized absent the merger. The Commissioner criticizes the Cole-Kearney report for not considering whether claimed efficiencies could have been achieved through less anti-competitive means than a full scale merger. Following the decision on this point in *Hillsdown*, cited above at paragraph [127], at page 332, the Tribunal is of the view that the test to be applied is whether the efficiency gains would likely be realized in the absence of the merger. In dealing with this issue in *Hillsdown*, the Tribunal stated:

> The Director's position is that cost savings that do not arise *uniquely* out of the merger are not to be considered as efficiency gains. The respondents' position is that the test to be applied is whether the efficiency gains would *likely* have been realized in the absence of the merger. The tribunal accepts the respondents' position.

[463] The Tribunal finds that the estimated gains in efficiency from this merger are $29.2 million per year over 10 years and these gains in efficiency would not likely be attained if the order for total divestiture were made. The Tribunal finds that the estimated deadweight loss is approximately $3.0 million per year over the same ten-year period.

[464] The Commissioner submits that qualitative effects include distributional impacts and other qualitative elements including changes to levels of service, product quality and product choice, increased probability of coordinated behaviour, and innovation. For the reasons already given, the Tribunal will not consider distribution impacts.

[465] The Tribunal took into account the increased probability of coordinated behaviour in its consideration of the evidence regarding a substantial lessening of competition. To the extent that the effect of such anti-competitive behaviour is a higher price, then it has already been reflected in the deadweight loss estimate. If there are other effects of coordinated behaviour to be considered under section 96, further and better evidence about those effects is required. It cannot suffice simply to restate the concern under section 92.

[466] A decline in service levels, holding quality of service constant, is also reflected in the deadweight loss estimate. However, the evidence indicates that ICG had established certain services and pricing arrangements (e.g., the Golf-Max program) that Superior and other propane marketers did not offer. Their removal or reduction would reduce the real output of the industry. Although no evidence was given on the likelihood or scope of the reduction or removal of these product offerings following the merger, the exercise of market power might take such forms together with, or instead of, a direct increase in price.

[467] The Tribunal must determine whether all of the gains in efficiency brought about or likely to be brought about by the instant merger are greater than the estimated deadweight loss and the negative qualitative effects resulting or likely to result therefrom. As noted above, this determination requires that the latter two components be combined and then compared with total efficiency gains. The Tribunal views the impact on resource allocation of the negative qualitative effects as minimal and as most unlikely to exceed in amount the estimated deadweight loss. Thus, the combined effects of lessening or prevention of competition from the instant merger cannot exceed, in the Tribunal's opinion, $6 million per year for 10 years. On this basis, the Tribunal finds that the gains in efficiency are greater than those effects.

[468] The Tribunal must also determine whether all of the gains in efficiency will offset those effects. Gains in efficiency exceed those effects by at least $23.2 million per year for 10 years and, in the Tribunal's opinion, adequately compensate society for those effects. Accordingly, the Tribunal finds that the gains in efficiency will offset those effects.

[469] For these reasons, the Tribunal is of the view that the Commissioner's application for an order under section 92 of the Act should be denied.

VII. DISSENT OPINION (MS. CHRISTINE LLOYD)

[470] There are several areas with respect to the appreciation of the facts underlying the efficiency defence and the legal interpretation of section 96 of the Act stated by the majority of the Tribunal with which I strongly disagree. The majority accepted for the most part the evidence on efficiencies claimed by the respondents, Superior and ICG. The respondents relied on the Cole-Kearney report; this expert report was prepared by two consulting firms whose mandate was to provide an opinion as to the value of the efficiencies that are likely to result from the merger. I have great concerns with certain aspects of the methodology and assumptions adopted by the experts that led to their calculations and resultant conclusions. Consequently, I am not satisfied, on a balance of probabilities that the gains in efficiency as claimed by the respondents are likely to be brought about by the merger as required by subsection 96(1) and that the claimed efficiencies would not likely be attained if the order for total divestiture were made. Finally, when conducting the trade-off analysis in section 96, I conclude that even if $29.2 million of efficiencies were likely to be realized (as accepted by the majority), the proposed gains in efficiency will not be greater than and will not *offset* the effects of any prevention or lessening of competition that will result or is likely to result from the merger.

A. QUANTUM OF EFFICIENCIES

(1) Problematic Aspects of the Methodology Used

[471] The respondents submit that the merger between Superior and ICG will allow them to achieve substantial gains in efficiency in the range of $40 million per annum based on the opinion of Cole-Kearney. They state that the aggregate of such gains is approximately $381 to $421 million measured in constant dollars over 10 years. I have great concerns regarding the respondents' efficiencies claimed in this proceeding as certain aspects of the methodology used to conduct the analysis are problematic.

[472] The efficiencies claimed by the respondents depend largely on the elimination of costs at the level of field operations, i.e., redundant branches and trucks and other related cost savings. Professors Schwindt and Globerman and Mr. Kemp state at page 23 of their report in rebuttal (confidential exhibit CA-3131) the following:

> C. Total Field Operations ($193.6 million, 48.3% of savings)
>
> Projected efficiencies generated at the field operations level are very significant, accounting for *nearly half of the anticipated total.* These efficiencies are largely attributable to the rationalization of the branch system and the improvement of delivery logistics. (emphasis added)

[473] These cost savings identified by Cole-Kearney are based on a definition of Superior's trade area size and overlaps with ICG's trade areas. The size of each trade area of Superior is defined on the basis of the farthest customer located from each respective branch as reported in the 1998 branch templates. This farthest distance then constitutes the radius of the trade area for each specific branch. The extent of the trade areas and trade area overlaps, in turn, constitute the framework on which the experts calculated the efficiencies claimed to result from the implementation of the merger of Superior and ICG.

[474] As stated above at paragraph [207] when assessing the validity of the 1998 branch templates, the Tribunal concludes that these templates are suspect and unreliable. Therefore, it appears that since Superior’s trade areas may not be as large as 620 kilometers, relying on these estimates to determine the extent of the overlaps may well overstate the cost savings that can be realized. Consequently, the impact on the results of the calculated efficiencies remains unknown.

[475] Further, I have noted that the experts estimate trade area overlaps through a manual process which was not verified in a way to assure accuracy. In response to a question asked by the Tribunal, Eric Fergin, one of the respondents’ experts responsible for this process, explained how these overlaps were identified:

> MS LLOYD: Getting back to the trade area size, Mr. Fergin, do you have any sort of scatter map or anything that indicates the customers so that we can actually see on a map indicating where the overlap is?
>
> MR. FERGIN: No, we don’t. I don’t have one with me. I know one was constructed -- *sketches were constructed, because they were based on rough estimates looking at the two areas, the overall area that they overlaid, and based on the raw data that we had which was actually provided to the Bureau*. I don’t have a reference number for the documents.
>
> We did that, but unfortunately, no, I don’t have a scatter map.
>
> MS LLOYD: It would be nice to see what that overlap is.
>
> MR. FERGIN: *I’m afraid I don’t have something like that*. (emphasis added).
>
> transcript at 34:6722 (8 December 1999).

[476] As I mentioned earlier, the methodology to define the trade areas and their resultant overlaps raise significant concerns for errors that would impact on the quantum of the efficiencies claimed. By using the farthest point to establish the radius as opposed to a defining line around the greatest density of customers, the respondents could have overstated the number of branches that could potentially be closed as well as the number of trucks and related equipment that could be eliminated. In fact, using smaller trade area definitions dictated by customer density may have resulted in no overlap between certain branches.

[477] Further, no mechanism or tools were used (other than the alleged review by Andrew Carroll of Superior, a process that remains unclear) to verify the validity of the analysis conducted by the respondents’ experts. I am of the view that a thorough reality check should have been conducted. For instance, the respondents could have used a Geographic Information System (commonly referred to as "GIS") to create a scatter map to plot customer locations in relation to each of their respective branches. This system would have produced accurate trade area overlaps to assist the experts in determining the number of redundant branches and accurate drive time patterns. The fact that the experts did not have recourse to an equivalent safeguard, in my view, undermines greatly the validity of the findings made by the experts. They were discussed with Mr. Fergin at the hearing:

> MR. FERGIN: . . . In fact, *we don't have information of granularity to show where all the branches were in each particular area.*
>
> I believe it was Ms Lloyd who asked us last Wednesday, in fact, if we had maps that plotted out the delivery sites relative to the branches, and as I stated at that time, we did not have that information.
>
> MS LLOYD: I thought you told me that you did it in lead-up to the analysis.
>
> MR. FERGIN: I'm sorry?
>
> MS LLOYD: I thought I understood that you actually did have it, but that was in the lead-up to the analysis, that you had done it. I must have misunderstood you.
>
> MR. FERGIN: *We had done it for the areas that we rode along in during our ride-alongs, but we hadn't done it for all the particular customers that were served by a particular branch.*
>
> MS LLOYD: I misunderstood you.
>
> MR. FERGIN: Okay. The other comment I have is: *Mr. Schwindt indicated that our methodology in terms of determining the area served for Superior was based solely on the radius of the trade area as determined by the farthest customer*.
>
> Now, *that was the initial basis*, but we didn't strictly use that information without going back to Andrew Carroll of Superior Propane, who was our key liaison on this project in terms of giving us information and validating information as to what areas, particular branches, particular satellites served to determine that would in fact be a valid area or it should be adjusted accordingly somewhat because of the fact that a situation like this might exist or there might be one far outlying branch.
>
> So the point I am trying to make is that: *We did not simply use the branch radius as the only factor for determining the trade areas served by Superior for a given branch.* (emphasis added)
>
> transcript at 37:7782, 7783 (14 December 1999).

[478] The only validation process presented by the respondents is that of the "ride-alongs", which were conducted to validate the model used to predict reduction in fleet and driver personnel and other results therefrom. They submit that these ride-alongs, which consist of spending a day with a driver delivering propane to customer locations, allow them to validate the model that they have developed. Yet, in cross-examination by the Commissioner, Mr. Fergin conceded that he had participated in only two ride-alongs in Sudbury (with Superior) and Stratford (with ICG) where a detailed analysis was done as to time spent on various activities (i.e., comparing time spent driving, pumping propane, delivering and generating delivery receipts). He mentioned that ride-alongs were also conducted without tabulating the data in Moncton, Lloydminster, Concord, Vimont, Coquitlam and Burnaby (transcript at 37:7795 (14 December 1999)).

[479] I am of the view that the validation process that was conducted in this case is insufficient to provide the assurance that the quantum of the efficiencies claimed is accurate. Further, the validation process was only performed with respect to the efficiencies claimed at the field operations level, most particularly with respect to the fleet reduction (annualized savings of $2.6 million which represents $33.4 million over 10 years) and related costs. In addition, inadequacies are further demonstrated by the fact that ride-alongs were conducted and reported using a sample of only two locations, one Superior and one ICG. As well, no allowance for regional differences was accounted for in this analysis.

(2) Highly Optimistic Assessment (That Does Not Account for Any Costs)

[480] The Commissioner's experts point out that the evaluation made by Cole-Kearney of the efficiencies is highly optimistic not to say unrealistic because their projection of the efficiencies does not account for any costs resulting from the integration of the two companies. They point out at pages 9 and 10 of their report in rebuttal (confidential exhibit CA-3131) that Cole-Kearney did not account for transition and integration costs and some volume losses. As they stated:

> The projected efficiencies of this transaction are largely driven by the integration of customer support (the second tier of administration) and field operations. These two broad categories of activities account for nearly two-thirds of the estimated cost savings, and both are complex. The proposed integration would involve the merging of ICG's 100,000 customers with SPI's 200,000 customer base, the integration of and rationalization of ICG's 110 distribution sites with SPI's 140 sites, the integration of a substantial number of ICG's 700 employees into SPI's workforce of 1,300 people, and the integration and rationalization of an extensive delivery fleet. The business involves the distribution of propane, so integration will require the meshing of two complex networks. Moreover, the two enterprises have adopted fundamentally different operating philosophies. One, ICG, is moving towards a more centralized, information technology dependent model, while the other, SPI, continues to operate a more decentralized system. Given these facts, the integration of these two firms would appear to be a daunting task. However, the Kearney Report identifies very few costs attributable to the actual process of integration.

[481] It is indubitable that the rationalization of the two site networks will generate real resource savings. However, the respondents' experts did not account for any increases in operating expenditures or ongoing capital expenditures that will result from additional costs related to volumes, staffing levels and number of customers. I am in agreement with Professors Schwindt and Globerman and Mr. Kemp when they state in their report in rebuttal (confidential exhibit CA-3131) at page 24 that:

> . . . Volumes in all rationalised trade areas will increase, and, at some, volumes will more than double. Staffing will increase at the branches . . . . [C]ustomers per branch will increase significantly, and this will increase the number of administrative staff required to serve these customers. . . . [M]any tasks will be reallocated to branch employees . . . . This will also increase staffing. . . . [I]ncreased volumes will require more delivery and service staff . . . .

[482] Further, Professors Schwindt and Globerman and Mr. Kemp point out that equipment located at the branch or operating from the branch (including storage tanks and trucks) will increase, which, in turn, will require more space and expanded infrastructure and further storage space for inventories (parts and customers tanks). This will result in increased costs that have not been accounted for by the respondents' experts. In support of their criticism, the Commissioner's experts examined changes to operations and used the example of the Peterborough branch (a branch where the rationalization is straight forward) to demonstrate the effects that the integration will have on costs, as shown at table 7 on page 26 of their report in rebuttal (confidential exhibit CA-3131). They conclude at page 26 that:

> *The staffing level will increase by 60 percent*. Cylinder operations will be consolidated at this site which will increase cylinder truck traffic. *The bulk delivery fleet will double.* The increased fleet will require additional maintenance capacity on the site as well as general access and parking area. This could require reconfiguration of the site to handle the step change in delivery equipment. *Bulk delivery volumes are projected to increase by 220 percent.* Such a large increase will mean that *both primary deliveries and bulk truck daily liftings will also increase proportionately.* This suggests that the *site will have to be reconfigured* to handle the significant increase in load factors. (emphasis added)

[483] The expert opinion of Professors Schwindt and Globerman and Mr. Kemp, as stated above, supports the Commissioner' submission that the efficiencies claimed by the respondents are overstated and hence, have not been demonstrated on a balance of probabilities:

> Secondly, we reiterate that the efficiency gains that were used for the purposes of this calculation of 21.2 million, on an annualized basis, is overstated for the reasons that we set out in the quantitative section of our materials.
>
> While that represents taking off the deductions that we were able to specifically identify in the evidence of Professors Schwindt and Globerman and as detailed in the argument, *we have pointed out many instances where the Respondents' efficiency gains are excessively optimistic, exaggerated, or don't meet the standard, in our submission, of being established on a balance of probabilities.* (emphasis added)
>
> transcript at 44:8737 (4 February 2000).

[484] As stated in paragraph 5.7.2 of the MEG's, cited above at paragraph [57], and as discussed by the author A. Neil Campbell in Merger *Law and Practice, The Regulation of Mergers under the Competition Act* (Scarborough: Carswell 1997) at 162, I am of the view that efficiencies should be measured net of the implementation costs that would be incurred in obtaining them. Therefore, "retooling" and other costs necessary to achieve efficiency gains should be deducted from the total value of the efficiencies.

[485] In light of my remarks on the methodology used by the experts and the insufficient consideration being given to additional costs that will result from the integration of field sites, I am of the view that the respondents have not demonstrated *on a balance of probabilities* the existence of the claimed $40 million of efficiencies per annum. As I have explained earlier, some problems identified with the methodology undermines greatly the validity of the efficiencies claimed by the respondents. There is no question that efficiencies can be realized in any merger or most particularly in this merger. However, the requirement under section 96 of the Act is to demonstrate the existence or the likelihood that the gains in efficiency will be brought about by the merger, hence the quantum of the claimed efficiencies on a balance of probabilities. In my view, the respondents have not met their burden of proof on that crucial element of their efficiency defence. As a result, I do not accept the respondents' efficiencies claim of $40 million per annum nor the reduced quantum of $29.2 million of efficiencies as accepted by the majority. Since I am not able to measure the degree to which these errors have affected the results nor able to quantify the inevitable costs that will result from this merger, I am not in a position to assess the real value of the efficiencies that will result or is likely to result from the merger and, therefore, will not speculate on their quantum.

B. THE MERGER HAS BROUGHT ABOUT OR IS LIKELY TO BRING ABOUT GAINS IN EFFICIENCY (I.E., LIKELY TO BE REALIZED POST-MERGER)

[486] The respondents have not convinced me on a balance of probabilities that the $40 million of efficiencies claimed will be realized for the reasons stated above. In addition, regardless of the quantum of efficiencies that *theoretically* could be realized, the Tribunal has not been provided, in my opinion, with any evidence that they are likely to *materialize* post-merger.

[487] In my view, the term "likely" used in section 96 requires more than the sole demonstration of the quantum of possible efficiencies. Rather, I believe that the term "likely" requires some evidence of the implementation process leading to the materialization of the claimed efficiencies. It is my opinion that evidence of this nature is necessary to provide the Tribunal with a *level of assurance* necessary to conclude that the efficiencies are *likely* to be realized post-merger (i.e., implemented by management).

[488] Evidence before the Tribunal stresses the importance of the merging parties having a detailed plan to ensure success of the merger. On that point, Paul Inglis, one of the respondents' experts on efficiencies, discussed a study that examines 115 mergers that took place between 1993 and 1996 in North America and which identifies the factors contributing to a successful merger. In that regard, Mr. Inglis explained that the *existence of a business plan* was one of the key factors leading to a successful merger:

> Success in a merger is, in large part, *determined during the planning stage, but of course* ***is executed after the merger happens.*** *You have to make sure that you follow through on the good plans that are made up front.* And so I would like to talk about, once again, ***the post-merger factors****;* and that is once the deal has consummated, once the agreement has been made.
>
> ***What are the things that allow us to believe that there is a good chance that the merger will be executed? Again, there are five things that we believe correlate. Is there a clear vision and strategy for the company? Do they know who the management is going to be? Do they have a good plan for putting that management in place? Have they got the capabilities to show results early and to gain momentum from developing those results? Have they recognized that there are cultural differences and do they have a plan to break through those cultural differences and meld the two organizations together?*** And finally, have they got a communications plan in place that will help them to execute that change in the cultures?...
>
> Let me turn next to determine the *management responsibility* point. Now, already there has been an identification of how many people will be in the management team. They plan to go forward with *ten senior management positions.* And they have a pool of senior resources to draw from. And that pool

> includes the likes of Geoff Mackey and Peter Jones and the other people that are the senior managers at ICG, as well as the people inside Superior. (emphasis added)
>
> transcript at 33:6347, 6348, 6350 (7 December 1999).

[489] Mr. Inglis was touching upon a crucial point when addressing the importance of having an implementation plan in order to assure that the claimed efficiencies are executed. In the absence of such a plan, there is no assurance or any indication as to the degree of probability that this merger will achieve the efficiency gains identified by the experts.

[490] A business plan setting out the implementation process/action plan outlining time frames for each step of the integration of the merger is necessary to achieve the claimed efficiencies. I take note that Mr. Inglis mentioned that Superior had a plan that was well articulated and that had been scrutinized over a long time frame. Unfortunately, the Tribunal was not presented with that alleged plan or any other plan. In fact, no such evidence was presented at the hearing. Mr. Schweitzer, Superior's Chief Executive Officer, the sole representative of Superior's management who testified at the hearing, did not provide evidence of the existence of a post-merger plan. It appears to me that a detailed business plan which expresses clearly the commitment and accountability of Superior's management (including the commitment of the Chief Executive Officer) should have been demonstrated. Further, there is no evidence that any study or due diligence was conducted to determine the cost effectiveness of merging the two companies prior to the decision by Superior to acquire ICG. Had this exercise been undertaken, the cost savings presented by Cole-Kearney would have had more credibility. Consequently, it appears to me that the realization of the efficiencies claimed strictly remain possibilities and not probabilities hence, the respondents have not demonstrated on a balance of probabilities that the efficiencies are likely to be realized.

[491] One could argue that the Management Agreement referred to at paragraphs [330]-[345], which provides incentives to SMS to increase the profitability of Superior and the cash distribution to unitholders of the Superior Income Fund (cash distribution), further supports the view that the efficiencies are likely to be realized. However, since the additional profits, which lead to SMS's entitlements can come from either an increase in price resulting from the exercise of market power and/or from cost reductions, I am of the view that the Management Agreement does not offer the level of assurance necessary to conclude that extra profits will be generated from the realization of the claimed efficiencies and hence, that these efficiencies are *likely* to be achieved.

[492] In the absence of any provision under the Act regarding the enforcement of the outcome, (i.e., the realization of the claimed efficiencies), it is even more critical that the respondents demonstrate that the merger is likely to bring about gains in efficiency *not solely on a theoretical level* through experts but also through direct evidence that *this is the direction that management is committed to seriously undertake with some assurance of completion post-merger*. Without such a crucial piece of evidence, it appears to me that the efficiencies claimed remain only a theoretical exercise that may never be implemented by management. This demonstration that the merger is likely to bring about gains in efficiency is an important element of the efficiency defence that they had to demonstrate in order to meet their burden of proof.

[493] In light of my previous comments regarding the efficiencies claimed by the respondents' experts and the lack of information regarding the alleged commitment of management to the actual implementation, including time frames dedicated to each step of the implementation process, I am of the view that the requirement that the respondents must demonstrate that the merger has brought about or is *likely* to bring about gains in efficiency has not been met.

C. "THAT THE EFFICIENCIES WOULD NOT LIKELY BE ATTAINED IF THE ORDER WERE MADE"

[494] Subparagraph 96(1) of the Act provides that:

> 96.(1) The Tribunal shall not make an order under section 92 if it finds that the merger or proposed merger in respect of which the application is made has brought about or is likely to bring about gains in efficiency that will be greater than, and will offset, the effects of any prevention or lessening of competition that will result or is likely to result from the merger or proposed merger ***and that the gains in efficiency would not likely be attained if the order were made.***
>
> (2) In considering whether a merger or proposed merger is likely to bring about gains in efficiency described in subsection (1), the Tribunal shall consider whether such gains will result in
> (a) a significant increase in the real value of exports; or
> (b) a significant substitution of domestic products for imported products.
>
> (3) For the purposes of this section, the Tribunal shall not find that a merger or proposed merger has brought about or is likely to bring about gains in efficiency ***by reason only of a redistribution of income between two or more persons***.
> (emphasis added)

[495] While the Commissioner bears the onus of proving the effects of any prevention or lessening of competition resulting from the merger on a balance of probabilities, it is the respondents' burden to prove all the elements of their defence in order to be successful. These elements are: the existence of the claimed efficiencies, the likelihood that they will be brought about by the merger (realized post-merger through their actual implementation), *the fact that they would not likely be attained if the order for total divestiture were made* and that they are not pecuniary in nature. Once a determination has been made of what gains (both quantitative and qualitative) should be considered in the trade-off analysis, then the balancing process can take place.

[496] Indeed, section 96 limits the efficiency gains that can be considered in the trade-off analysis to those that *would not likely be attained if the order were made* and to those that do not constitute *a redistribution of income between two or more persons*. While I agree with the majority that only efficiencies that constitute "real" resource savings must be considered and not those that are pecuniary in nature, I disagree with their appreciation of the requirement set out in subparagraph 96(1) *and that the gains in efficiency would not likely be attained if the order were made*.

[497] This requirement of subparagraph 96(1) that they would not likely be attained if the order were made leads to this question: would the gains in efficiency likely be realized if the order for total divestiture were made? In other words, if the order for total divestiture were made, would the two companies independently likely realize gains in efficiency in some other way? The burden of proving this element also falls on the respondents and, in my view, has not been met on a balance of probabilities.

[498] Indeed, *only those gains* which would not likely be attained if the order were made can be claimed by the respondents. This requirement is to ensure that gains that would likely be obtained absent the merger for instance as a result of internal growth, merger or joint venture with a third party, *restructuring*, or contractual arrangements (e.g., specialization agreement) are excluded from efficiencies claimed. Therefore, it appears that the merging parties had the onus of providing a reasonable explanation as to why efficiencies would not likely be sought through an alternative mean if the order for total divestiture were made.

[499] In this case, the respondents have not, in my view, proved that the claimed efficiencies would not likely be attained if the order for total divestiture were made. Cole-Kearney's mandate was to provide *an opinion as to the value of efficiencies* that were likely to result from a merger of Superior and ICG. Their report states that alternative means were explored within the context of common industry practice such as internal growth, merger or joint venture with a third party or specialization agreement or licensing lease or other contractual arrangements. On that basis, they concluded that the merger is the only means by which to achieve efficiencies. No comparative evidence was provided on the results arising from the value of efficiencies from alternative means to assure the Tribunal that a merger was the only means by which to achieve the efficiencies. Surprisingly, restructuring was not mentioned by the experts.

[500] Further, no evidence in support of their conclusions was provided to the Tribunal nor any explanation as to why measures such as restructuring would not likely be undertaken by Superior to reduce its costs in order to achieve efficiencies in some other way, absent the merger. Indeed, while evidence was provided regarding ICG's transformation process (a process that led to efficiencies which were properly not claimed by the experts), no evidence was provided as to what Superior would or would not likely undertake to achieve efficiency gains if the order were made. The Tribunal does not have evidence to conclude that Superior, on its own, had already "cut-out the fat" within its organization before undertaking the merger with ICG. Consequently, the efficiencies claimed by the respondents could include cost savings that Superior would likely achieve on its own, absent the merger. Such efficiencies resulting from Superior's own restructuring would have been discounted from the efficiencies claimed. Indeed, as stated in the MEG's, cited above at paragraph [57], where *some or all* of the claimed efficiency gains would likely be attained through other means if the order were made, they cannot be attributed to the merger and hence, must not be considered in the section 96 trade-off analysis. For these reasons, I am of the view that the respondents failed to prove that the gains in efficiency would not likely be attained if the order were made.

D. ISSUES REGARDING THE TRADE-OFF ANALYSIS

[501] As stated above, the respondents argue that the test to be met under section 96 of the Act is that the efficiencies must be greater than and offset any substantial lessening of competition and that the effects of such are measured by the deadweight loss to the economy and exclude wealth transfers between producers and consumers which are neutral to the economy.

[502] The Commissioner submits that in conducting the trade-off analysis set out in section 96, the Tribunal has a statutory responsibility to exercise its judgment as to the weight to be accorded to the transfer from consumers to producers. Hence, he submits that applying a standard with a fixed predetermined weight would be contrary to section 96. Further, the Commissioner submits that the efficiency gains do not *offset*, i.e., "neutralize" or "compensate for", the anti-competitive effects caused to the economy as a whole by this merger.

[503] The majority accepted that $29.2 million of efficiencies per annum is likely to be realized and is satisfied that the gains in efficiency are greater than and offset the effects of any prevention or lessening of competition that is likely to result from the merger. In their view, these quantitative efficiencies are greater than and offset the deadweight loss to the economy evaluated at $3 million per annum and the qualitative effects of any prevention or lessening of competition.

[504] I agree with the majority that the trade-off analysis must be conducted through a single test where quantitative (productive) and qualitative (dynamic) efficiency gains together must be greater than and offset the quantitative (deadweight loss) and qualitative (e.g., reduction in non-price dimensions of competition) effects of any prevention or lessening of competition resulting from the merger. While I agree with the single test approach (i.e., as opposed to two tests, one quantitative and one qualitative), I disagree with their interpretation of the word "offset" in subsection 96(1) and with the weight that they attach to the effects of this merger.

[505] It is clear to me that Parliament intended the members of the Tribunal to exercise their judgment when assessing the trade-off set out in section 96 of the Act. During the proceedings of the Legislative Committee on Bill C-91, there were several references to the fact that the terms used in that section should not be so precise as to restrict the Tribunal's interpretation and discretion. Rather, there was an agreement that the Tribunal should have the jurisdiction to exercise its discretion based on the merits of a specific case. It appears that the legislator intended that the Tribunal should not become so rigid when applying the law as to prevent some mergers that would benefit the economy and conversely allowing others that would clearly not benefit the economy. Therefore, the legislator decided not to provide a specific list of factors in addition to those already stated in subsection 96(2); the increase in the real value of exports and substitution of domestic products for imported products. Instead, the legislator preferred to rely on the discretion of the Tribunal members who have expertise to hear competition law matters.

[506] While I recognize that efficiencies are given special consideration under section 96 and may constitute a defence to an otherwise anti-competitive merger, it appears to me that section 96 is an *exception to the application of section 92 of the Act* and not an *exception to the Act itself.* As Parliament stated, the trade-off set out in section 96 involves a balancing process and does not constitute, in my view, an *absolute* defence where the effects of the anti-competitive merger ought to be ignored. By that, I mean while the section 96 trade-off gives precedence to the gains in efficiency likely to result from the merger, this section must be interpreted in accordance with the objective and goals of the Act. This objective is to maintain and encourage competition in Canada in order to achieve the goals of the Act (i.e., the promotion of the efficiency and adaptability of the Canadian economy, the expansion of opportunities for Canadian participation in world markets, the equitable opportunity for small and medium-sized enterprises to participate in the Canadian economy and the provision of competitive prices and product choices to consumers). Therefore, it appears to me that the effects of any prevention or lessening of competition, which are contrary to the goals stated in the purpose clause of the Act, ought to be considered (for instance, the reduction or loss of consumer choice) in the trade-off analysis in order to determine whether the gains in efficiency are greater than and offset those effects.

[507] In my view, if the analysis under section 96 were so simplistic as to only require the comparison between quantitative efficiency gains and the deadweight loss to the economy, this could lead to distorted outcomes. For instance, such a narrow interpretation would mean that an anti-competitive merger would more easily meet the test set out in the section as the demand for the relevant product becomes less elastic (i.e., less price-sensitive). This perverse result arises from the fact that the calculated deadweight loss is proportional to the elasticity of demand. Therefore, following the interpretation of the majority, smaller gains in efficiency are required to outweigh and offset the deadweight loss to the economy when the demand is inelastic. In my view, there is no obvious reason to explain why Parliament would have written section 96 to give preference to anti-competitive mergers involving products for which demand is relatively inelastic (e.g., commodities).

[508] Consequently, I am of the view that the qualitative effects must be given appropriate consideration in the trade-off analysis. Indeed, while the deadweight loss can simply be depicted on a matrix and quantified, a matrix does not take into account the peculiar effects of the merger under review. As it is recognized by authorities in the field and by the MEG's, cited above at paragraph [57], some effects of a merger cannot be valued in dollar terms, for instance reduction in service, quality, variety, innovation and other non-dimensions of competition. Therefore, these effects must receive a weight that is qualitative in nature. Accordingly, as certain effects in this merger cannot be quantified, I am of the view that they must be considered as qualitative and given an appropriate weight in the trade-off analysis.

[509] As I explained earlier, I do not accept the quantum of efficiencies as adopted by the majority. However, I will use that amount in table 2 (contained in paragraph [512]) simply for the purpose of illustration. As seen in table 2, which compares the efficiency gains claimed in this merger to the effects of any prevention or lessening of competition, the respondents have not claimed any qualitative effects that will benefit society as a whole. For instance, they do not claim any dynamic efficiencies or that the efficiencies will result in a significant increase in the real value of exports as stated at subsection 96(2) of the Act. Therefore, I cannot conclude that this merger will generate *qualitative* gains in efficiency that will benefit the economy as a whole.

[510] As to the qualitative effects of any prevention or lessening of competition, I have identified some that have not been given, in my view, sufficient weight in the analysis conducted by the majority. These effects are the loss of a vigorous competitor, which reduces consumer choice generally, particularly for national account customers and the absence of choice due to the elimination of competition in 16 markets. Further, the merged entity will have the ability to exercise market power which may result in the imposition of unilateral *price increases* and/or a *reduction or elimination of programs* such as the Cap-It and Auto-fill offered to customers. Conversely, the merged entity could use its market power to reduce prices for a period of time in order to squeeze competitors out of the market. This latter effect would be contrary to one of the goals stated at section 1.1 of the Act which seeks to provide an equitable opportunity for small and medium businesses to participate in the Canadian economy.

[511] Finally, I am of the opinion that consideration must be given to the significant wealth transfer from consumers to producers that will result from a price increase. Controversy surrounds the issue as to whether the wealth transfer is an effect that should be considered in the analysis stated at section 96. While a wealth transfer resulting from a merger is deemed to be neutral from a pure economic standpoint, it is not neutral in the context of the purpose clause of the Act which states that the objective is to promote and encourage competition in order to, among other goals, *provide consumers with competitive prices and product choices.* I am of the view that if Parliament's intention were that gains resulting from higher profits (due to a reduction in competition) and achieved at the expense of consumers should be viewed as neutral, surely it would have stated so in the Act. Indeed, if this had been the intention of the legislator, no references would have been made to consumers in section 1.1 and further, the term "effects" in section 96 would have been defined as to exclude any consideration of that nature. Therefore, I agree with the *obiter dictum* of Reed J. in *Hillsdown,* cited above at paragraph [127], at page 337, that the word "effects" should not be given such a restrictive interpretation as to exclude the transfer from consumers to producers.

[512] I am of the opinion that the wealth transfer from consumers to producers should not be viewed as a quantitative effect. There are no provisions in the Act suggesting that the effects must be quantified. It is my opinion that the transfer should be given qualitative consideration in the balancing process, which requires an exercise in judgment. A qualitative consideration allows for flexibility in the evaluation of each individual case under review.

TABLE 2: Trade-off Analysis

	Quantitative	Qualitative
Positive	$29.2 million as accepted by the majority (see my dissenting opinion above)	The respondents provided no evidence of any qualitative "positive" effects.
Negative	$3 million (deadweight loss)	Loss of a vigorous competitor which *reduces* consumer choices. *Absence* of choice for consumers in 16 markets and for national account customers. Ability to exercise market power that may result in: - the imposition of a *unilateral price increase or price decrease* ("to squeeze competitors out" of the market);

- the *reduction or elimination of programs* offered to customers (i.e., Cap-It, Auto-fill, etc.);

- the *reduction or elimination* of services (e.g., delivery services in certain areas); and

- significant wealth transfer from consumers to producers.

[513] I am of the view that when assessing the gains in efficiency against the effects of any prevention or lessening of competition, the claimed efficiencies are not greater than and do not *offset* these effects.

[514] As stated by the Commissioner, I am of the view that in order for the defence to be successful, the respondents must demonstrate that the efficiencies will be greater than and *will offset* (i.e., compensate for) the effects of a merger. The respondents provided no evidence that the efficiencies claimed will *compensate* for the detrimental effects that will result from the merger. For example, the respondents could have claimed that the merger is likely to bring about dynamic efficiencies arising from innovation that will benefit the Canadian economy. Such qualitative efficiency gains could have been assessed in the trade-off analysis as ways to compensate for the detrimental effects caused to the economy as a whole. However, the respondents did not even attempt to present any such *beneficial* effect to the economy that will result from the merger.

E. CONCLUSION

[515] In light of my dissenting reasons, I conclude that the respondents have not met their burden of proof of demonstrating, on a balance of probabilities, that the merger has brought about or is likely to bring about gains in efficiency that will be greater than and will offset the effects of any prevention or lessening of competition. Therefore, the Tribunal should make the order for total divestiture by Superior of all of ICG's shares and assets (including those of the previously integrated branches thereof) formulated pursuant to section 92 of the Act.

VIII. ORDER

[516] The Tribunal hereby orders that the Commissioner's application for an order under section 92 of the Act is denied.

DATED at Ottawa, this 30th day of August, 2000.

SIGNED on behalf of the Tribunal by the presiding judicial member.

(s) Marc Nadon

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