original
File no. CT 98/2

THE COMPETITION TRIBUNAL

IN THE MATTER OF THE COMPETITION ACT, R.S. 1985, c.C-34, as amended, and the Competition Tribunal Rules, SOR/94-290, as amended (the "Rules");

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 Director of Personal Trigunal Investigation and Research for orders pursuant to a Sepanda De La consideration other provisions of the Competition Act consequential thereto.

BETWEEN:

THE COMMISSIONER OF COMPETITION

Applicant

OTTAWA, ONT.

- and -

SUPERIOR PROPANE INC. et al.

Respondents

AFFIDAVIT OF DOUGLAS WEST

- I, Douglas Scott West, of the city of Ottawa in the Province of Ontario, MAKE OATH AND SAY:
- 1. I, Douglas Scott West, hold the rank of Full Professor of Economics in the Department of Economics, University of Alberta at Edmonton. I have been a Full Professor at the University of Alberta since 1992. I have also held an academic position at Purdue University (from 1979 to 1981). My degrees include a Ph.D. in Economics from the University of British Columbia and a B.A. from the University of Michigan. My fields of research and teaching include industrial organization, competition policy, and spatial competition analysis. I have authored or co-authored 30 publications in the field of industrial organization and policy. Many of these

publications employ spatial competition analysis, including "Testing for Market Preemption Using Sequential Location Data" (*Bell Journal* 1981), "Predation among Supermarkets: An Algorithmic Locational Analysis" (*Journal of Urban Economics*, 1984), "Tests of Intra urban Central Place Theories" (*Economic Journal*, 1985), and "Spatial Price Equilibrium with Product Variety, Chain Stores and Integer Pricing: An Empirical Analysis" (*Canadian Journal of Economics*, 1991). I have been retained by the Commissioner of Competition to conduct a geographic market share analysis with respect to the within matter.

- 2. I have reviewed the Affidavit of Dennis W. Carlton containing his opinion and calculations in this matter. In particular, I have reviewed Dr. Carlton's regression analysis and have attempted to determine the data that were used in the regression, and the sources of those data, as a preliminary step to a check of its veracity. I have been unable to do so for a number of reasons relating to problems with the data supplied with Dr. Carlton's report, as described herein below.
- First, the regression data contained in two spread sheets provided along with Dr. 3. Carlton's report and identified as regdat7b.dbf and regdatab.dbf, containing 1997 and 1998 market share information, respectively (the "regression data") refer to certain percentages as the market shares of various Superior Propane Inc. ("SPI") ICG Propane Inc. ("ICG") or independent propane retailers. While Dr. Carlton says in his report that these numbers are drawn from certain "branch templates" completed in 1999, I have reviewed those branch templates and find that the market share percentages contained in the branch templates do not correspond to the percentages applied by Dr. Carlton to each of the branches in the regression data. The percentages contained in the branch templates are integers (e.g. 43%") while the percentages contained in the regression date files are decimal numbers (e.g., "25.73%"). Either the branch template market share figures have been subjected to a calculation which was not provided in or along with Dr. Carlton's report, or the market share figures provided by Dr. Carlton came from another source. Without knowing what the source of these market shares is, it is not possible to attempt to replicate Dr. Carlton's results or otherwise check his calculations and conclusions.
- 4. Further, in attachment 5 of his report, Dr. Carlton lists all of the 63 SPI branches for which he has both sales and market share data and aggregates some satellites with branches to arrive at 50 "branches" for the purposes of his calculations. I have compared the list of branches contained in attachment 5 to the list of branches contained in the regression data files, and have found that there are a number of inconsistencies which make it impossible to test the conclusions contained in paragraphs 26 and 27 of Dr. Carlton's report.
 - a) Database file regdat7b.dbf (the 1997 regression data file) contains 1997 market share information for 57 numbered branches. Database file

regdatab.dbf (the 1998 regression data file) contains 1998 sales and market share information for 65 numbered branches. There are 10 branch numbers listed in the 1998 regression data which are not listed in the 1997 data as follows:

15 - Smithville

22 - Pembroke

444 - Grande Prairie

807 - Chetwynd

831 - Watson Lake

16 - Simco

14 - Strathroy

467 - Ft. McMurray

808 - Terrace

None of the above branches appear to have been new branches in 1998.

- b) In addition, the 1997 regression data files contain references to two branches, 345 Trenton and 348 Truro, which are not referred to in the 1998 regression data files. These branches were not on a list of closed branches provided by Superior in response to undertaking 95, which I have reviewed.
- c) Further, in attachment 10 to his report, Dr. Carlton has referred to an urban vs. rural "sort" of Superior branches. Some branches referred to in attachment 10 are not found in attachment 5, as follows: 6, 33, 240, 246, 421, 427, 445, 456, 557, 704, and 712 of these, 33, 240, and 456 do not appear in either the 1997 or 1998 regression data base files.
- d) Finally, in attachment 5, Dr. Carlton assigns some branch identification numbers to Superior branches which differ from the branch numbers assigned by Superior. For example, Dr. Carlton uses \$420 to describe Superior's Elk point and Maidstone branch, while Superior has used that number to describe its Macklin branch. Dr. Carlton uses \$431 to describe Superior's Fort Nelson and Whitehorse branch, while Superior uses that number to describe its Fort St-John branch. Further errors of this nature are found with respect to the numbers for the Dartmouth branch (344 vice 343); Bridgewater branch (345 vice 344); Kentville branch (347 vice 346); Truro branch (350 vice 348); and Sydney branch (343 vice 350). These errors further compound the difficulty caused by the other inconsistent references to branch numbers.

- 5. In paragraph 26 of his report, Dr. Carlton concludes that based on information for 1998, the aggregate share of independent retailers exceeds ICG's share in 41 of 64 Superior branches. In paragraph 27, Dr. Carlton refers to a specific number of Superior branches facing competition from independents. In both of these cases, because of the data problems described above, I cannot check the data without knowing the branches Dr. Carlton has used or created by aggregating branches or satellites in his report, as it is impossible to define the universe of branches from which Dr. Carlton draws these numbers.
- 6. In order for the Commissioner's representatives to replicate and test the conclusions contained in Dr. Carlton's report, and specifically in paragraphs 26 and 27, it will be necessary for me to review the actual data files which list the branches with sales to determine where Dr. Carlton uses branch, satellite or aggregated data. Those data files have not been provided to the Commissioner. I believe these data may be found on the ANNVOL 1 and ANNVOL 2 data files referred to in Dr. Carlton's report at Appendix B, page 2, or on other documents referred to as used by Dr. Carlton but not provided to the Commissioner to date.
- 7. I am informed by Steven T. Robertson, counsel to the Commissioner and believe that on September 1, 1999, he forwarded to counsel for the respondents by fax, a request for the above described data. Attached hereto Exhibit "A" is a true copy of the said fax letter.

SWORN before me, at the City of Hull, in the Province of Quebec, this first day of September, 1999

Commissioner for taking Oaths etc.

(Barreau du Quitee 193513-5) Douglas Scott West