

THE COMPETITION TRIBUNAL

IN THE MATTER OF THE *COMPETITION ACT*, R.S.C. 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 Investigation and Research for orders pursuant to s.92 and other provisions of the *Competition Act* consequential thereto.

BETWEEN:

THE DIRECTOR OF INVESTIGATION AND RESEARCH

Applicant

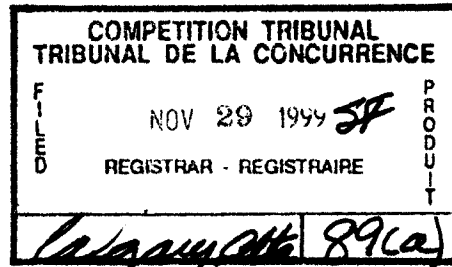
- and -

SUPERIOR PROPANE INC. and ICG PROPANE INC.

Respondents


AFFIDAVIT OF COLIN O'LEARY AND ERIC FERGIN


I, COLIN O'LEARY, of the City of Mississauga, in the Province of Ontario,
and I, ERIC FERGIN, of the City of Toronto, in the Province of Ontario MAKE OATH AND
SAY:



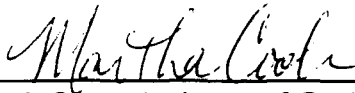
1. Attached hereto and marked as Exhibit "A" is the experts' report by the Cole Valuation Partners Limited and A.T. Kearney firms. This report represents the work, conclusions and opinions of Cole Valuation Partners Limited and A.T. Kearney.

SWORN before me at the City)
)
of Toronto, in the Province of)
)
Ontario, this 17th day of August, 1999)
)



COLIN O'LEARY


ERIC BERGIN



A Commissioner of Oaths, Etc.

Martha Anne Cook, a Commissioner, etc.,
Province of Ontario, while a student-at-law.
Expires June 1, 2002.

This is Exhibit "A" referred to in the
Affidavit of COLIN O'LEARY and
ERIC FERGIN, sworn before me this
17th day of August, 1999.



A Commissioner of Oaths, Etc.

Martha Anne Cook, a Commissioner, etc.,
Province of Ontario, while a student-at-law.
Expires June 1, 2002.

THE COMPETITION TRIBUNAL

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BETWEEN:

THE DIRECTOR OF INVESTIGATION AND
RESEARCH

Applicant

- and -

SUPERIOR PROPANE INC. and ICG PROPANE INC.

Respondents

AFFIDAVIT

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Commissioner of Competition v. Superior Propane Inc. et al

**Quantification of the Efficiency Value Resulting
from the Merger of Superior Propane and ICG Propane**

Cole Valuation Partners Limited

August 17, 1999

COMMISSIONER OF COMPETITION V. SUPERIOR PROPANE INC. ET AL

**QUANTIFICATION OF THE EFFICIENCY VALUE RESULTING
FROM THE MERGER OF SUPERIOR PROPANE AND ICG PROPANE**

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COMMISSIONER OF COMPETITION V. SUPERIOR PROPANE INC. ET AL

QUANTIFICATION OF THE EFFICIENCY VALUE RESULTING
FROM THE MERGER OF SUPERIOR PROPANE AND ICG PROPANE

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COMMISSIONER OF COMPETITION V. SUPERIOR PROPANE INC. ET AL

**QUANTIFICATION OF THE EFFICIENCY VALUE RESULTING
FROM THE MERGER OF SUPERIOR PROPANE AND ICG PROPANE**

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August 17, 1999

PRIVILEGED AND CONFIDENTIAL

Mr. Neil Finkelstein
Davies, Ward & Beck
Barristers & Solicitors
44th Floor
1 First Canadian Place
Toronto, Ontario
M5X 1B1

Dear Mr. Finkelstein:

Re: Commissioner of Competition v. Superior Propane Inc. et al
Quantification of the Efficiency Value Resulting from the Merger of
Superior Propane and ICG Propane

INTRODUCTION

You have requested our opinion as to the value of the efficiencies that are likely to result from a merger of Superior Propane Inc. ("Superior" or "Superior Propane") with ICG Propane Inc. ("ICG" or "ICG Propane").

We understand that you require our opinion to determine whether, for the purposes of Section 96 of the Competition Act, the value of these efficiencies will be greater than, and will offset the effects of, any prevention or lessening of competition that will or is likely to result from that merger. We understand this report is to be filed with the Competition Tribunal in respect of an application made by the Commissioner of Competition regarding the merger of Superior and ICG.

For the purposes of this report:

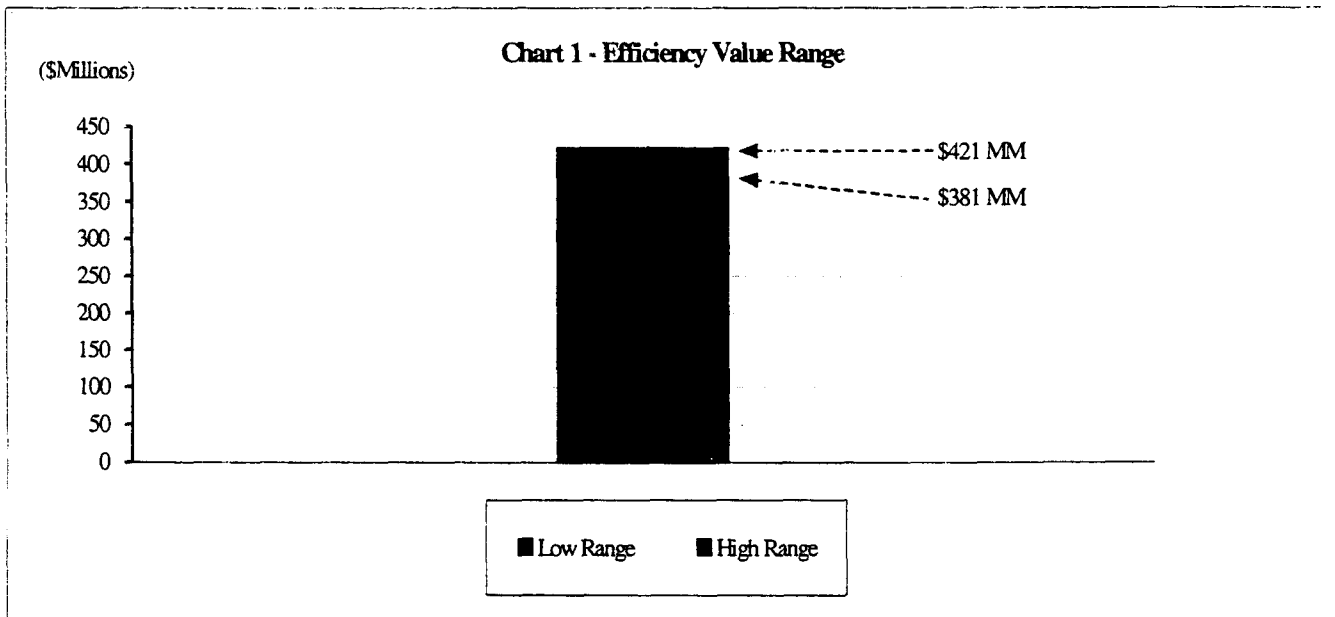
- the incremental cash flows from cost efficiencies expected to result as a consequence of the merger of Superior and ICG are referred to as "Efficiency Gains";
- Efficiency Gains are determined in constant dollars as at August, 1999;
- the aggregate of all of the Efficiency Gains is referred to as the "Efficiency Value". Hence, Efficiency Value is determined in constant dollars as at August, 1999;

- the net present value of the aggregate of all of the Efficiency Gains, determined over a specified term and at a market discount rate is referred to as the “Efficiency Net Present Value”.

SUMMARY CONCLUSION

Amount of Efficiency Value, Efficiency Net Present Value and Efficiency Gains

In our opinion the Efficiency Value falls in the range of \$381 million to \$421 million, as shown in Chart 1 below. If we are asked for a point estimate, we would recommend the midpoint of the range, \$401 million.



Efficiency Gains include those efficiencies that are likely to result from the merger of Superior and ICG. They do not include efficiencies which would likely be achieved through alternative means, considered within the context of common industry practice, such as:

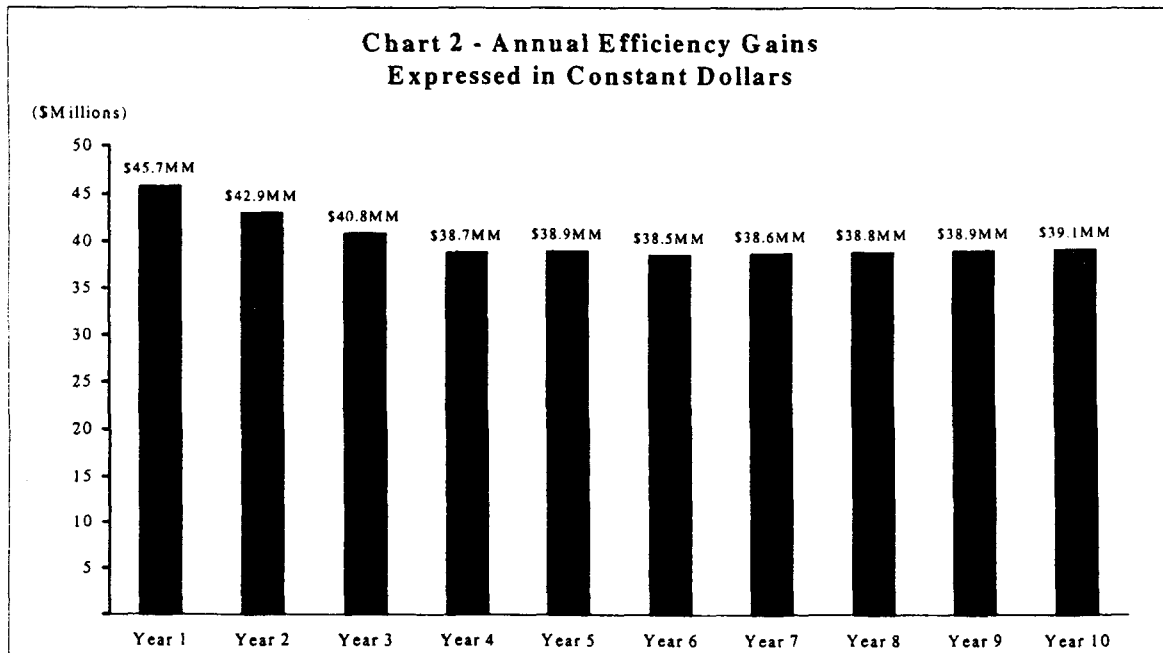
- *internal growth* – the propane industry is a mature one. Demand is considered stable or declining and therefore efficiencies are not expected to be based on internal growth;
- *merger or joint venture with a third party* – achievement of the Efficiency Gains depends on factors unique to the Superior merger with ICG. No other combination of firms creates a comparable opportunity for the elimination of significant duplicated costs, redundant personnel, systems and assets. The specific reasons for this are noted on the page 4 including: the business lines, products and services of the two businesses being almost identical; there is extensive overlap in the geographic areas within which the two companies

operate; and the current Superior business model is capable of being overlaid on to the merged organization without complex re-engineering; and

- *specialization agreement, or licensing, lease or other contractual arrangement* – Efficiency Gains result from the elimination of costs, redundant personnel, systems and assets, arising out of the merger of Superior and ICG. Absent the merger, these costs could not be significantly eliminated by specialization agreements, or licensing, lease or other contractual arrangements that might be entered into by either Superior or ICG.

The merger of Superior and ICG and their ability to realize the Efficiency Gains are reflective of a very strong trend. Large companies, in mature industries, who have already completed substantial internal cost cutting, are merging. Their objectives are: to remain competitive; to ward off the threat of larger more efficient international organizations being created; and, to create real opportunities for further cost cutting. These business practices are consistent with and supportive of the themes and analysis that follows.

The expected annual Efficiency Gains are shown in Chart 2 below.



Nature of Efficiency Gains, Efficiency Value and Related Confidence Levels

The merger of Superior and ICG, if implemented, will likely result in significant efficiencies which would not likely be achieved absent the merger. The principal reason why they would not likely be achieved by some other means (such as those discussed at page 2 hereof) is that they result from the elimination of significant duplicated costs, redundant personnel, systems and assets, which elimination is dependent on this merger of the Superior and ICG businesses. We are confident that such efficiencies are likely to be successfully implemented for the reasons noted below, amongst other considerations:

- they are not dependent on factors outside the influence of Superior and ICG;
- they are internally focused and reflect savings in controllable cost areas;
- there is extensive overlap in the geographic areas within which the two companies operate and 82 operating locations will be closed;
- the Superior business model is easily adopted by ICG personnel and 280.5 positions will be eliminated;
- the efficiencies are not on account of a complex or speculative re-engineering of product lines and services, development of new products or services, cross-selling opportunities or development of a new business model;
- the efficiencies are not revenue or demand oriented; and
- the business lines, products and services of the two businesses are substantially similar in the sense that propane is a commodity type product and other than as a result of service, personnel or price, the two companies' products are indistinguishable.

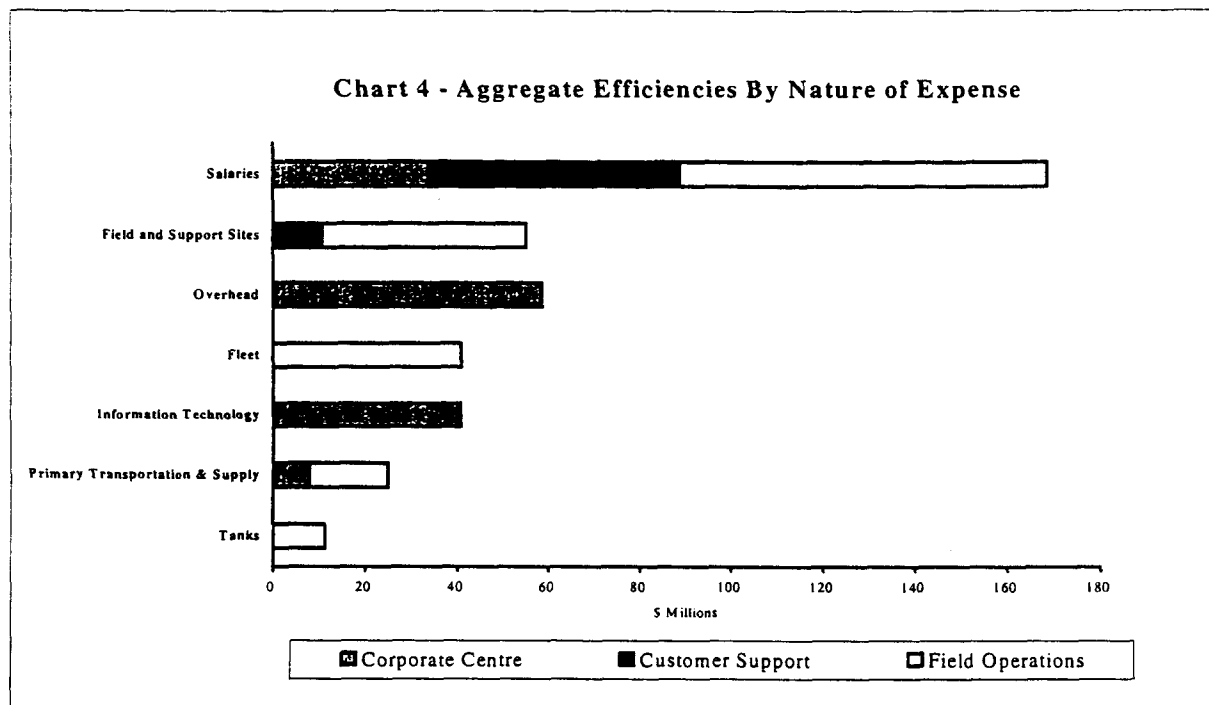
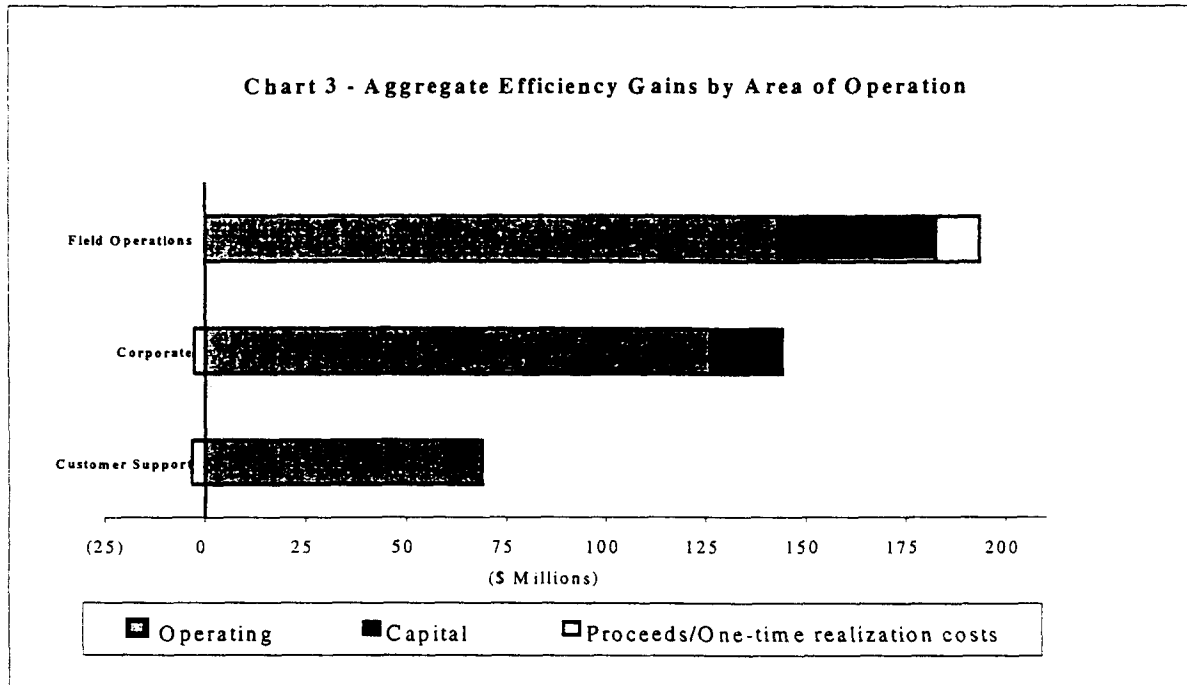
The Efficiency Gains are based on cash flows and therefore include:

- saved ongoing operating costs;
- saved ongoing capital expenditures; and
- proceeds from the sale of redundant assets net of the related one time restructuring expenditures.

The three areas of operation that give rise to the Efficiency Gains are noted below:

- Corporate Centre;
- Customer Support; and
- Field Operations.

Charts 3 and 4 below summarize the Efficiency Gains by areas of operation and the nature of the savings:



SUMMARY OF DETAILED EFFICIENCY GAINS

Organization of this Section

The Efficiency Gains and supporting detail are reviewed in this summary, and then again in greater detail in the Appendices. Our analysis is organized within three areas of operation - Corporate Centre, Customer Support and Field Operations. Each of these areas of operation is then further sub-divided to highlight the nature of the efficiencies and their extent.

The table below highlights in greater detail the nature of the efficiencies and their extent within each of the three areas of operation:

Table 1 - Area of Operations and Nature of Efficiency Gains (\$Millions)

| Corporate Centre (see App. 1, Section A) | \$ | Customer Support (see App. 1, Section B) | \$ | Field Operations (see App. 1, Section C) | \$ |
|---|--------------|---|-------------|---|--------------|
| Information Systems Operations | 29.8 | Field Administration | 35.7 | Field Sites | 40.3 |
| Information Technology Capital | 14.8 | Sales Force | 18.3 | Delivery Drivers | 36.3 |
| Procurement Expenditures | 26.1 | Regulatory, Safety & Technical Support | 8.0 | Delivery Fleet | 33.4 |
| Marketing | 12.8 | Regional Team Support | 3.7 | Branch Managers | 21.3 |
| Corporate Leadership | 12.7 | | | Supply & Primary Transport Operations | 17.0 |
| Finance | 12.1 | | | Service Technicians | 16.7 |
| Head Office & Administration | 9.7 | | | Customer Equipment | 11.3 |
| Supply & Transportation Organization | 6.7 | | | Service Fleet | 8.5 |
| Public Company Costs | 6.6 | | | Plant Operations Staff | 5.7 |
| Human Resources | 6.0 | | | Propane Field Inventory | 3.1 |
| Other Corporate Positions | 4.2 | | | | |
| TOTAL | 141.5 | | 65.7 | | 193.6 |

The specific timing of each Efficiency Gain is also addressed in the Appendices. All the necessary changes that give rise to the Efficiency Gains are likely to be completed in the first three years following the merger. Changes are planned by Superior to be implemented in an orderly fashion and, in the first three years, the Efficiency Gains build up progressively. One time asset disposal proceeds and implementation costs are specifically identified. The Efficiency Gains in subsequent years are assumed to be constant if not specifically otherwise noted.

Recurring Themes and Common Patterns to the Cost Savings

The recurring theme in the majority of the Efficiency Gains is the elimination of duplicate personnel, systems and assets. The primary factors contributing to these Efficiency Gains were noted at page 4 hereof, including: the business lines, products and services of the two businesses are almost identical; there is extensive overlap in the geographic areas within which the two companies operate; and the current Superior business model is easily capable of being overlaid on to the merged organization.

Efficiency Gains, Efficiency Value and Efficiency Net Present Value are based on net cash flows. Hence, each cost saving and one-time expenditure and receipt has been analyzed according to a common pattern as outlined below:

Overview of Efficiency Gains

The amount of the Efficiency Gain in constant dollars to be realized over ten years by the merged organization is stated along with the primary reason for the saving.

Description of Function/Activity

The specific activity or function giving rise to the Efficiency Gain is explained. Where appropriate, there is also an analysis comparing Superior to ICG and the aggregate pre-merger costs.

Drivers of Activity Level

The essential factors (“drivers”) giving rise to cost increases and decreases are articulated. There is separate commentary as to ongoing operating costs and capital costs.

Requirements of the Merged Organization

Only the cost savings that naturally flow from the merger are included in Efficiency Gains. In other words, efficiencies that would likely have been achieved absent the merger are not included.

Calculation of Efficiency Gains

Each activity/cost area is summarized in a chart that sets out:

- the annual Efficiency Gain for each of the 10 years post merger;
- the ten year total;
- severance and other one-time expenditures; and
- one-time proceeds from redundant assets.

Whenever practical, we also set out a brief practical perspective or summary of the detailed analysis.

Implementation Cost and Timing

Incremental investment, severance and other one-time expenditures required to realize or implement savings are deductions in the computation of Efficiency Gains. Receipts or proceeds from resale of redundant assets are additions.

The immediately following pages summarize the Efficiency Gains within the three major areas of operation. The detailed analyses can be found in Appendix 1 as indicated below:

| <u>Area of Operation</u> | <u>Tab Numbers</u> |
|---------------------------------|---------------------------|
| Corporate Centre | A1-11 |
| Customer Support | B1-4 |
| Field Operations | C1-10 |

Summary of Efficiency Gains - Corporate Centre

Total Efficiency Gains for Corporate Centre for the first 10 years following the merger are \$141.5 million.

Corporate Centre is comprised of corporate management functions, such as:

- head office management including the leadership, finance, and human resource areas;
- governance, regulatory and public company matters;
- information systems technology;
- marketing; and
- purchasing of propane and other goods and services.

These Efficiency Gains will likely be realized because:

- the merged organization will require fewer people;
- fewer people will result in reduced information technology cost; and
- the combination of head office operations and corporate functions will save corporate costs such as: rent and operating costs, marketing, public company costs, training, legal and procurement costs.

The Corporate Centre Efficiency Gains, by type of redundancy, are as follows:

Table 2: Summary of Corporate Centre Efficiency Gains by Type of Redundancy

| Corporate Centre | Number Eliminated | 10 Year Savings (\$Millions) |
|--|--------------------------|-------------------------------------|
| Corporate Overhead Cost Savings | n/a | 66.7 |
| Eliminated Positions | 44 | 34.0 |
| Information System Operating and Maintenance | n/a | 31.2 |
| ICG Servers | 23 | 9.6 |
| Total Efficiency Gains | n/a | 141.5 |

Table 3 on the opposite page summarizes the Corporate Centre Efficiency Gains for each cost centre and Charts 5 and 6 that follow show the same Efficiency Gains graphically.

The major items are: information systems operations and information technology capital costs (approximately \$45 million, being \$29.8 plus \$14.8 million), procurement (approximately \$26 million) and marketing, corporate leadership and finance at approximately \$12-13 million each.

Table 3: Corporate Centre Efficiency Gains Summarized by Cost Centre

| Nature of Costs/Cost Centre | Amount (\$Millions) | | Comments | Reference to Appendix 1 |
|--------------------------------------|---------------------|--------------|---|-------------------------|
| | Annualized | 10 Years | | |
| Information Systems Operations | 3.5 | 29.8 | Operating and maintenance and 7 positions will be eliminated. | Section A - Tab 5 |
| Information Technology Capital Costs | 1.3 | 14.8 | 23 servers will be eliminated and capital expenditures reduced. | Section A - Tab 6 |
| Procurement | 2.8 | 26.1 | Increased volumes means economies of scale. | Section A - Tab 9 |
| Marketing Expenditures | 1.4 | 12.8 | ICG marketing costs and 2 positions will be eliminated. | Section A - Tab 7 |
| Corporate Leadership | 1.5 | 12.7 | 7 positions will be eliminated. | Section A - Tab 1 |
| Finance | 1.4 | 12.1 | 21 positions will be eliminated. | Section A - Tab 2 |
| Head Office and Administration | 1.0 | 9.7 | Head offices will be consolidated. | Section A - Tab 3 |
| Supply & Transportation Organization | 0.7 | 6.7 | Supply and transport operations will be consolidated. | Section A - Tab 10 |
| Public Company Costs | 0.7 | 6.6 | ICG public company costs will not be required. | Section A - Tab 8 |
| Human Resources | 0.6 | 6.0 | Training cost and 4 positions will be eliminated. | Section A - Tab 4 |
| Other Corporate Positions | 0.5 | 4.2 | 5 positions will be eliminated. | Section A - Tab 11 |
| Total | 15.4 | 141.5 | | |

Chart 5
Total Corporate Centre Efficiencies by Cost Centre
(\$ Millions)

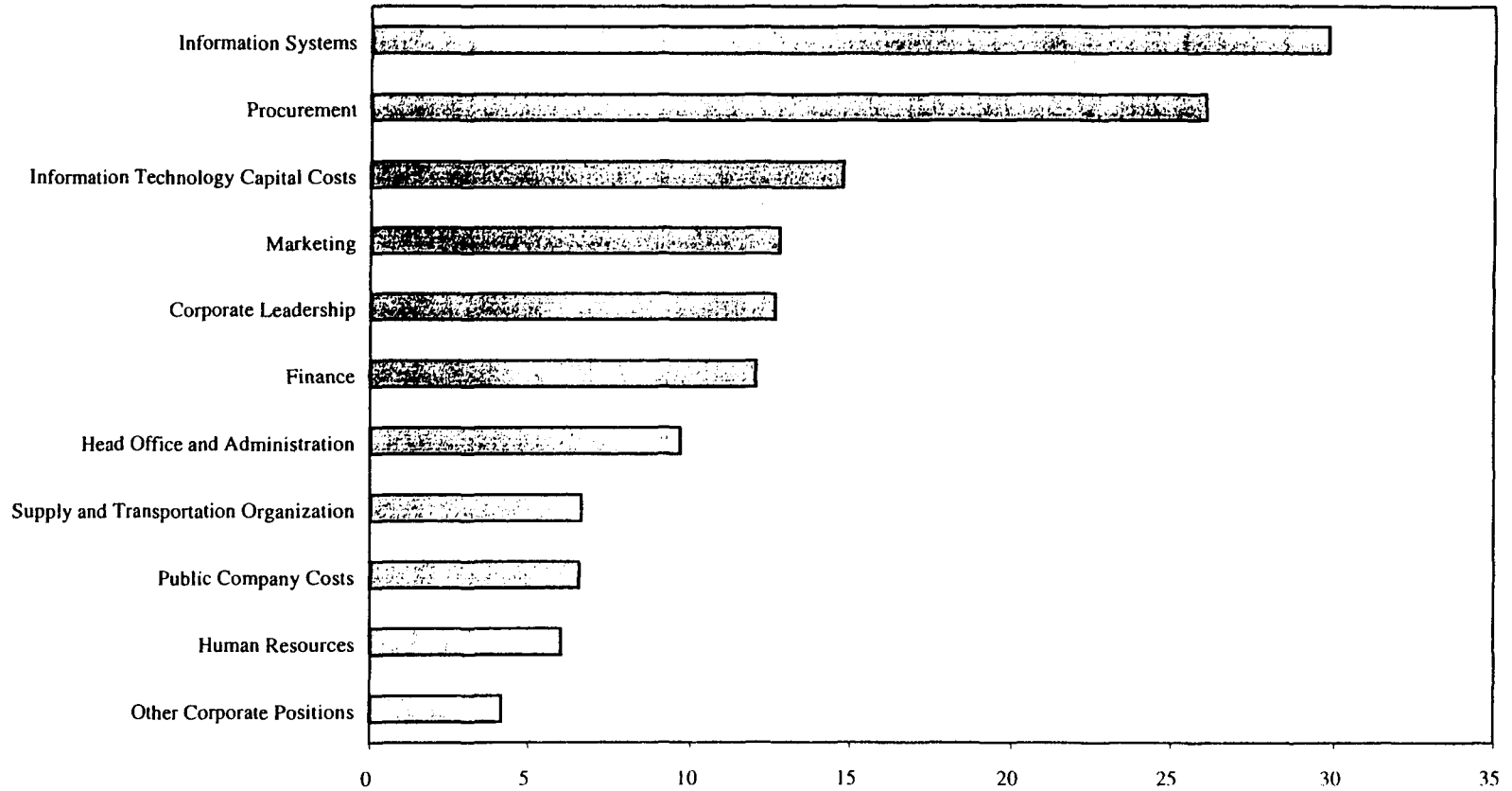
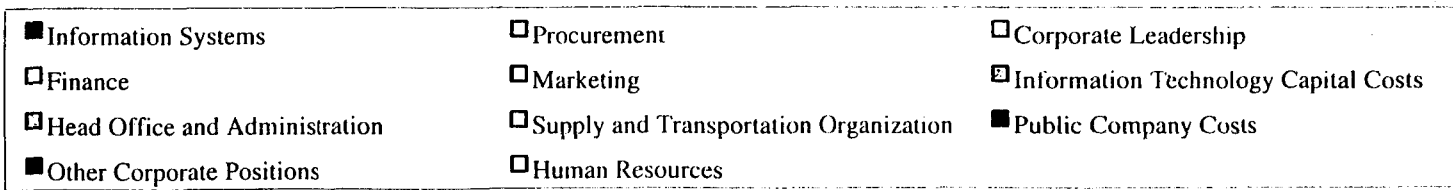
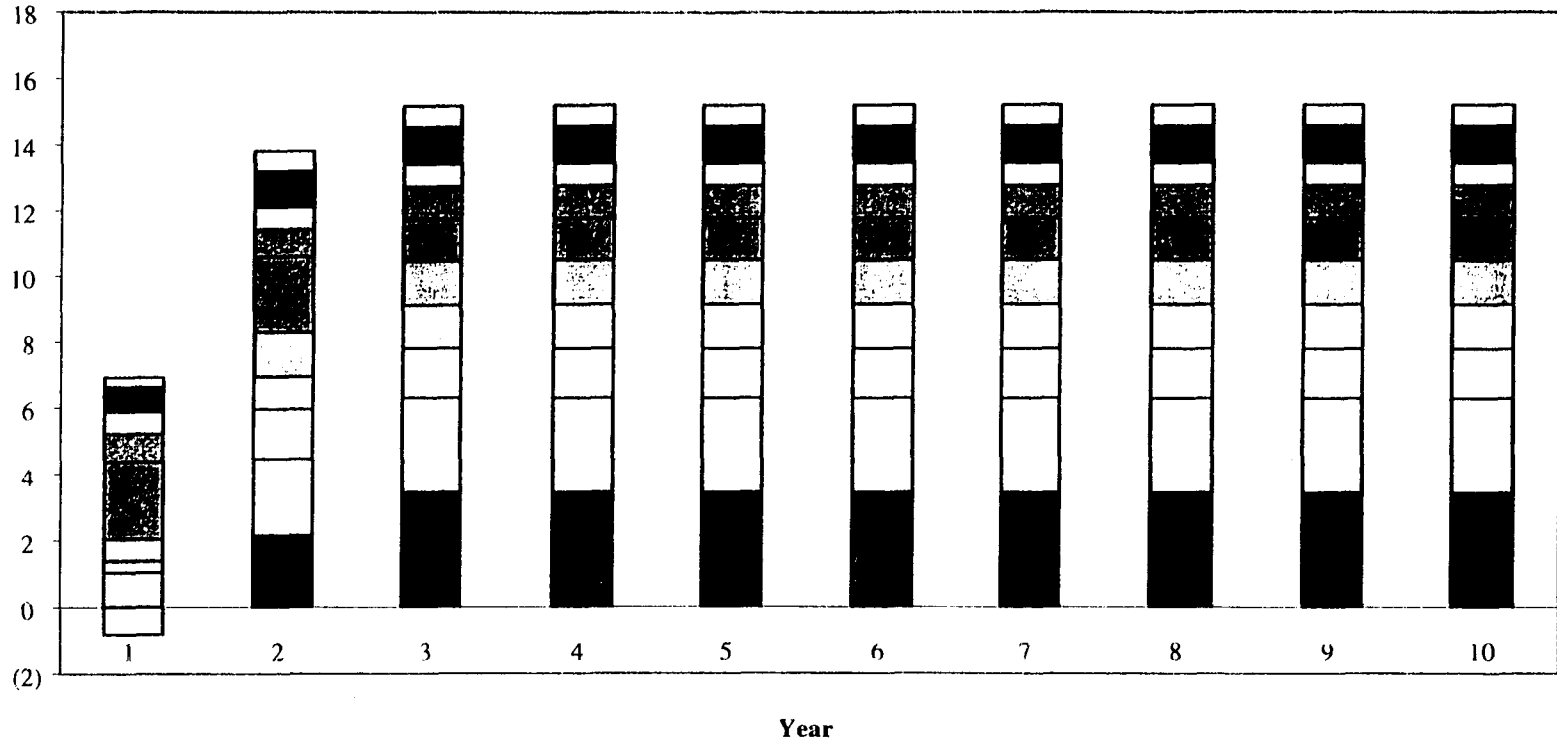


Chart 6
Corporate Centre Efficiencies by Cost Centre by Year
 (\$ Millions)



Summary of Efficiency Gains - Customer Support

Total Efficiency Gains for Customer Support for the first 10 years following the merger are \$65.7 million.

Customer Support is comprised of customer related functions, such as:

- sales force and sales force management;
- customer service and administration; and
- regulatory and safety.

These Efficiency Gains will likely be realized because in the overlapping geographic areas within which both companies operate, there are duplicate facilities and related redundant personnel and costs.

The Customer Support Efficiency Gains, by type of redundancy, are as follows:

Table 4: Summary of Customer Support Efficiency Gains by Type of Redundancy

| Customer Support | Number Eliminated | 10 Year Savings (\$Millions) |
|-------------------------------|--------------------------|-------------------------------------|
| Elimination of Positions | 79.5 | 54.9 |
| Elimination of Field Sites | 1 | 8.4 |
| Elimination of Field Offices | 5 | 2.4 |
| Total Efficiency Gains | n/a | 65.7 |

Table 5 on the opposite page summarizes the Customer Support Efficiency Gains for each cost centre and Charts 7 and 8 that follow show the same Efficiency Gains graphically.

The major items are: field support administration (approximately \$36 million) and sales force (approximately \$18 million).

Table 5: Customer Support Efficiency Gains Summarized by Cost Centre

| Nature of Costs/Cost Centre | Amount (\$Millions) | | Comments | Reference to Appendix 1 |
|--|---------------------|-------------|--|-------------------------|
| | Annualized | 10 Years | | |
| Field Support Administration | 3.9 | 35.7 | 36 positions, 1 field site and 5 field offices will be eliminated. | Section B - Tab 1 |
| Sales Force | 1.9 | 18.3 | 24.5 positions will be eliminated. | Section B - Tab 2 |
| Regulatory, Safety and Technical Support | 0.9 | 8.0 | 12 positions will be eliminated. | Section B - Tab 4 |
| Regional Team Support | 0.5 | 3.7 | 7 positions will be eliminated. | Section B - Tab 3 |
| Total | 7.2 | 65.7 | | |

Chart 7
Total Customer Support Efficiencies by Cost Centre
(\$ Millions)

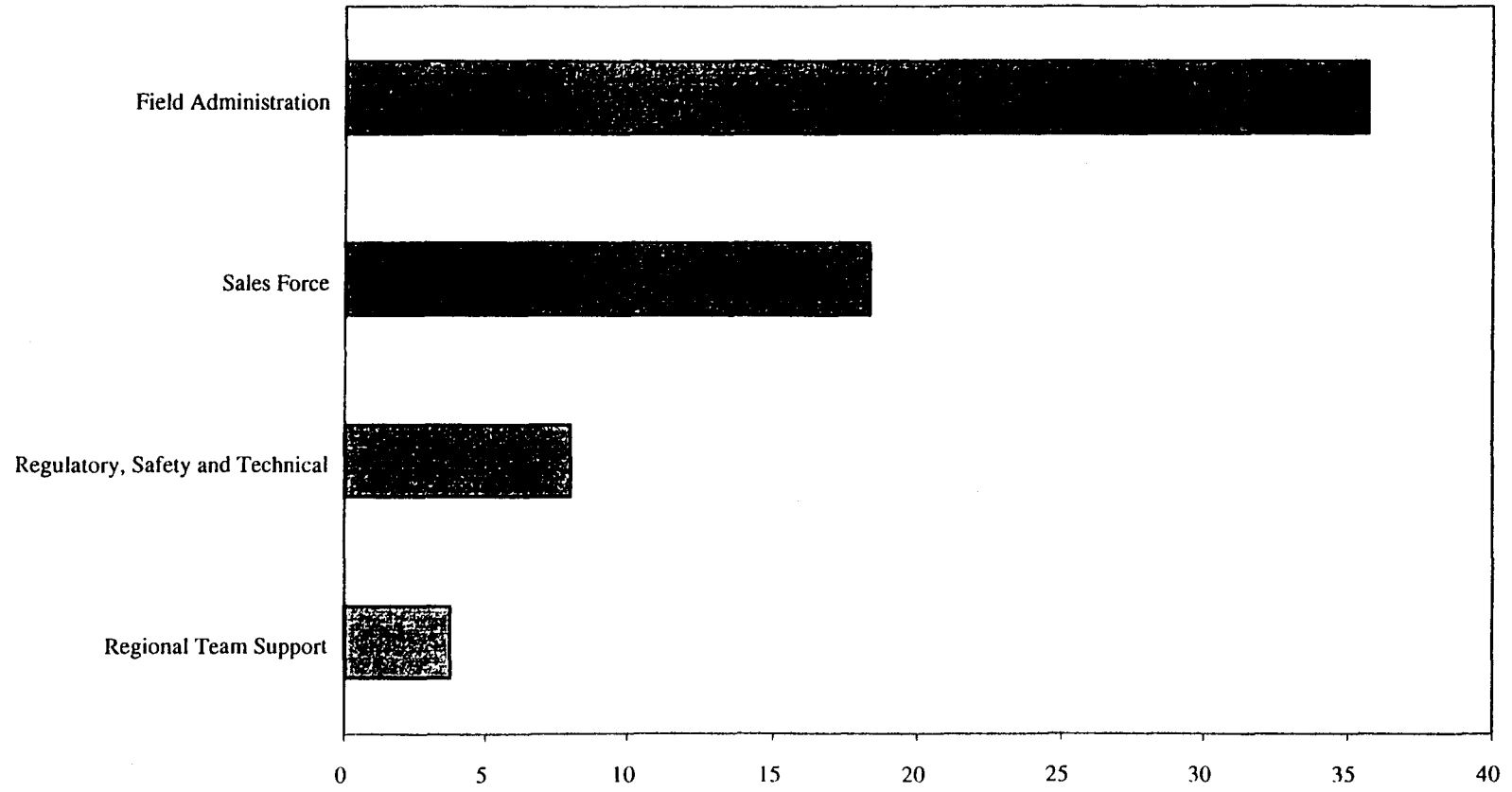
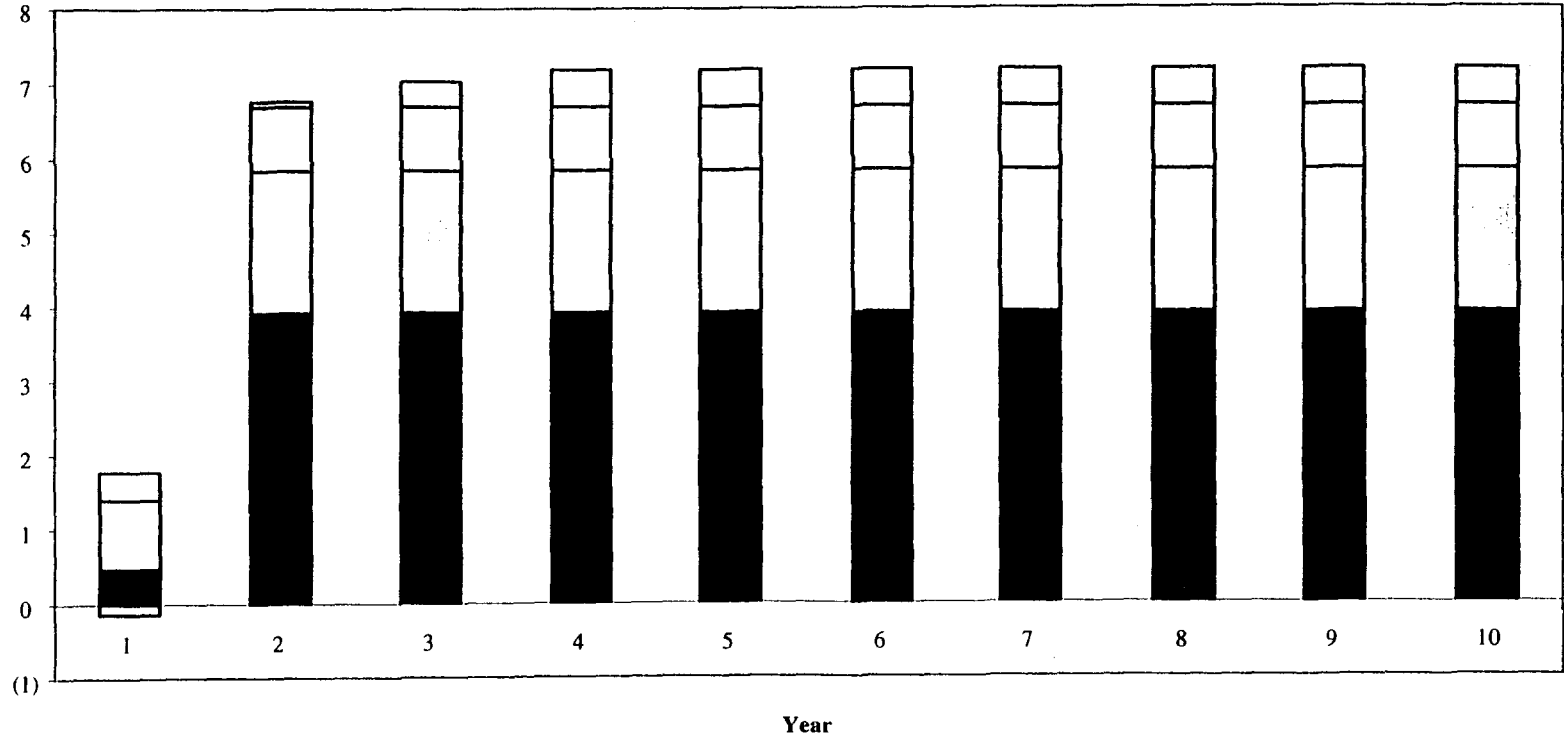


Chart 8
Customer Support Efficiencies by Cost Centre by Year
(\$ Millions)



Summary of Efficiency Gains - Field Operations

Total Efficiency Gains for Field Operations for the first 10 years following the merger are \$193.6 million.

Field Operations is comprised of:

- field sites, branches and plant operations;
- delivery and service fleets;
- propane and tank inventory; and
- supply and transportation.

These Efficiency Gains will likely be realized because in the overlapping geographic areas within which both companies operate, there are duplicate facilities, trucks, inventory of product and parts, storage containers, and related redundant personnel and costs. Further, larger delivery volumes in each territory will enable the merged organization to reduce supply and transportation costs.

The Field Operations Efficiency Gains, by type of redundancy, are as follows:

Table 6: Summary of Field Operations Efficiency Gains by Type of Redundancy

| Field Operations | Number Eliminated | 10 Year Savings (\$Millions) |
|-----------------------------------|--------------------------|-------------------------------------|
| Eliminated Positions | 157 | 80.0 |
| Eliminated Field Locations | 76 | 40.3 |
| Eliminated Delivery Trucks | 80 | 33.4 |
| Supply and Transport Cost Savings | n/a | 17.0 |
| Eliminated Tank Inventory | 17,694 | 11.3 |
| Eliminated Crane Trucks | 10 | 3.8 |
| Eliminated Service Trucks | 26 | 3.7 |
| Storage Tanks | 68 | 2.3 |
| Service Parts Inventory | n/a | 1.1 |
| Eliminated Propane Inventory | 5.9 million litres | .7 |
| Total Efficiency Gains | n/a | 193.6 |

Table 7 on the opposite page summarizes the Field Operations Efficiency Gains for each cost centre and Charts 9 and 10 that follow show the same Efficiency Gains graphically.

The major items are: field sites (approximately \$40 million), delivery drivers and fleet (approximately \$70 million, being \$36.3 plus \$33.4 million), service technicians and service fleet (approximately \$25 million being \$16.7 plus \$8.5 million) and branch managers (approximately \$21 million).

Table 7: Field Operations Efficiency Gains Summarized by Cost Centre

| Nature of Costs/Cost Centre | Amount (\$Millions) | | Comments | Reference to Appendix 1 |
|-----------------------------------|---------------------|--------------|--|-------------------------|
| | Annualized | 10 Years | | |
| Field Sites | 3.5 | 40.3 | 76 field sites will be eliminated. | Section C - Tab 1 |
| Delivery Drivers | 3.9 | 36.3 | 80 delivery drivers will be eliminated. | Section C - Tab 5 |
| Delivery Fleet | 2.6 | 33.4 | 80 delivery trucks will be eliminated. | Section C - Tab 4 |
| Branch Managers | 2.3 | 21.3 | 29 branch managers will be eliminated. | Section C - Tab 2 |
| Supply and Primary Transportation | 1.4 | 17.0 | Economies of scale will reduce supply and transportation costs | Section C - Tab 10 |
| Service Technicians | 1.8 | 16.7 | 35 service technicians will be eliminated. | Section C - Tab 6 |
| Customer Equipment | 0.0 | 11.3 | 17,694 propane tanks will not be required. | Section C - Tab 9 |
| Service Fleet | 0.6 | 8.5 | 26 service trucks and 10 crane trucks will be eliminated. | Section C - Tab 7 |
| Plant and Operations Staff | 0.6 | 5.7 | 13 plant and operations staff will be eliminated. | Section C - Tab 3 |
| Propane Field Inventory | 0.0 | 3.1 | 5.9 million litres of propane and 68 storage tanks will not be required. | Section C - Tab 8 |
| Total | 16.7 | 193.6 | | |

Chart 9
Total Field Operations Efficiencies by Cost Centre
(\$ Millions)

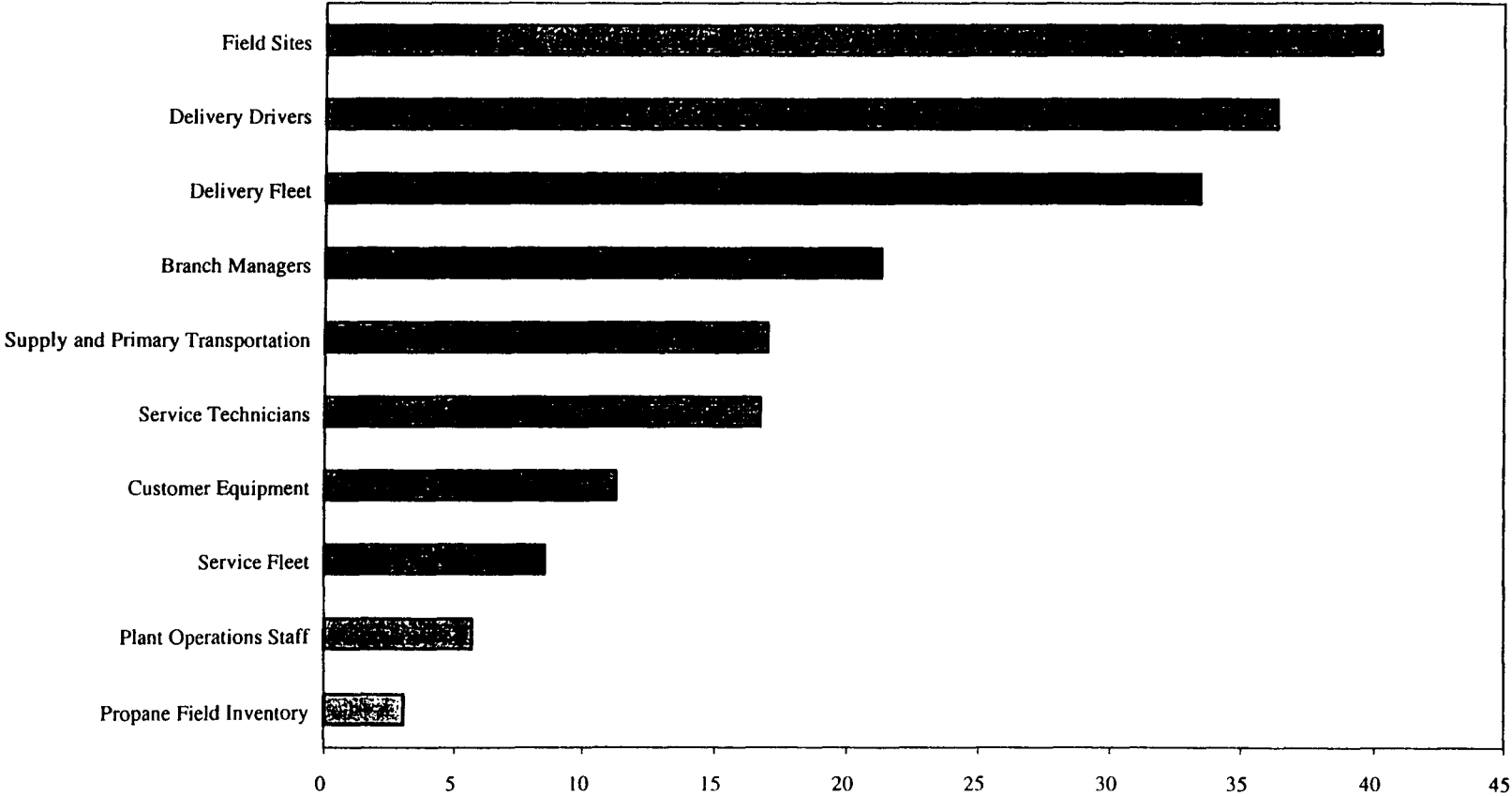
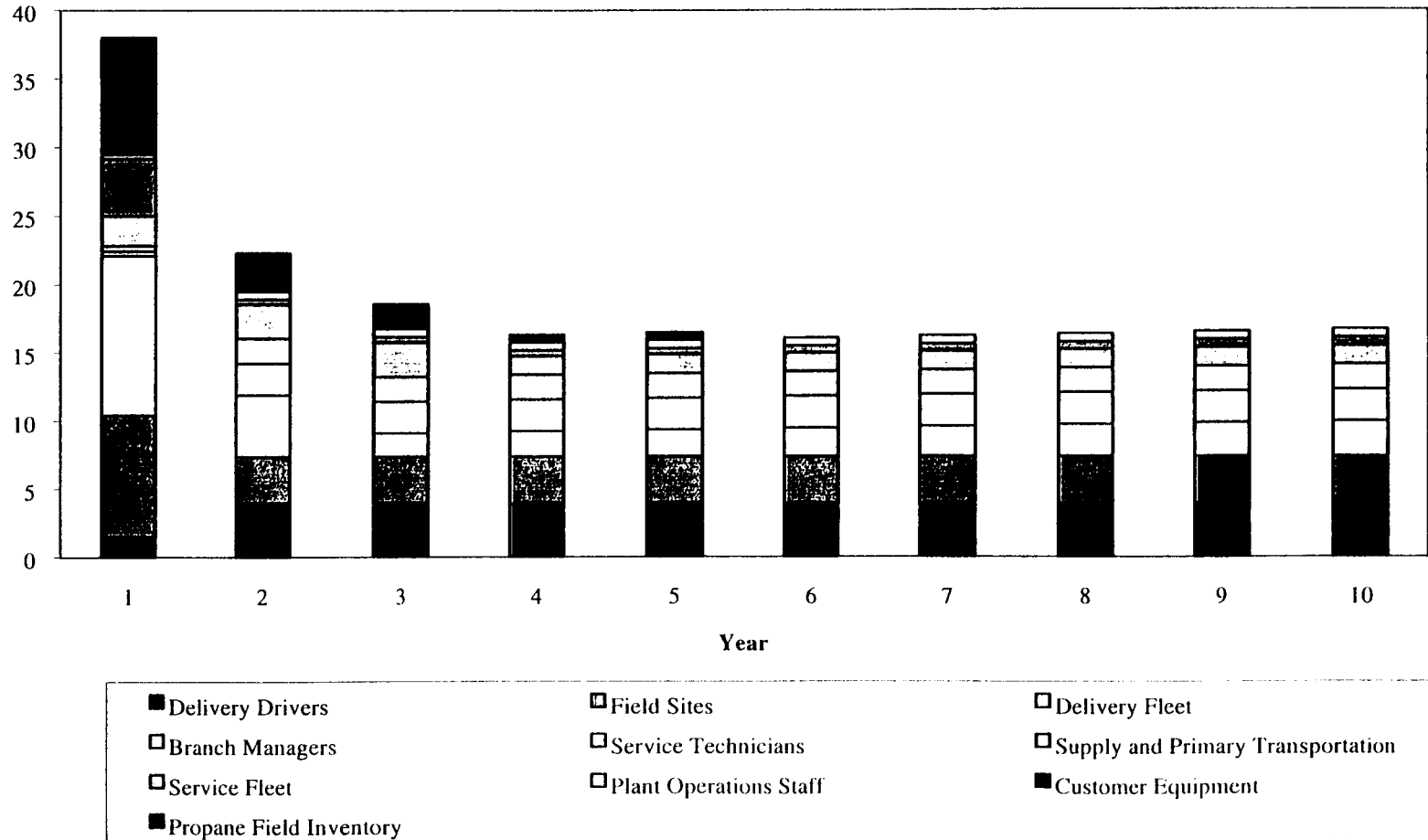


Chart 10
Field Operations Efficiencies by Cost Centre by Year
(\$ Millions)



Cash Flows from the One-Time Sale of Redundant Assets Net of One-Time Expenditures Necessary to Realize the Efficiency Gains

Many of Efficiency Gains require some incremental expenditure or investment in order to be realized. For example:

- the salary savings included in the Efficiency Value, generally, require the incurring of severance costs. Severance costs of \$9.7¹ million have thus reduced the Efficiency Value otherwise determined.
- in order to implement the Corporate Centre and Customer Support Efficiency Gains and lay the foundation for the Efficiency Gains in these areas, the necessary aggregate one-time expenditures (such as severance and computer upgrades) are expected to be greater than the proceeds from the sale of redundant assets within these activity areas.
- implementation of the Field Operations Efficiency Gains give rise to a one-time sale of redundant assets (such as field sites, fleet and inventory). These are expected to be greater than the one-time expenditures within this area.

Excluded Efficiency Gains

In the calculation of Efficiency Gains, efficiencies (both cost savings and revenue opportunities) that would likely have been realized in the absence of the merger have been excluded.

Further, in order to be conservative, Efficiency Gains include only those items resulting from the merger of Superior and ICG that can be realized with a high level of confidence. Thus a number of efficiencies that will likely be realized but which cannot be quantified at this time with a high level of confidence are excluded.

Included in the detailed analysis by activity area (within Appendix 1, Tabs A, B and C), is commentary concerning such excluded efficiencies. The estimated quantum of these excluded efficiencies is \$13 million to \$21 million over a 10 year period. See Appendix 1, Section D for a summary of these excluded efficiencies.

¹ Severance has not been reduced for regular attrition rates and has been calculated based on historic tenure as follows:

- Corporate leadership – 2 years severance for the CEO and COO positions and 1 year for other members of the leadership team; and
- Non-leadership – 3 weeks per year of service using the average service term of the various employee groups.

Variability of Expected Results

The Efficiency Gains have been conservatively estimated. We have a very high level of confidence in their realization. As noted, the cushion provided by the above referred to \$13 million to \$21 million has been excluded. In addition, to account for variability in the quantum, we have used a range of \pm \$20 million of the aggregate of the Efficiency Gains otherwise determined in arriving at the Efficiency Value.

A.T. Kearney Report

We have given our unqualified opinion on the Efficiency Gains, Efficiency Value and Efficiency Net Present Value. Our opinion is based in large part on the Efficiency Gains determined by A.T. Kearney. We have reviewed their methodology, analyses and conclusions, and we are confident in the conclusions expressed in their report. We have taken all the steps that in our opinion are necessary for us to be able to rely on their work without qualification. A.T. Kearney's report is attached as Appendix 1. The conclusions in the A.T. Kearney report are summarized in the preceding pages.

THE COMPUTATION OF EFFICIENCY NET PRESENT VALUE AND CHOICE OF DISCOUNT RATES AND TERM

In our opinion the Efficiency Net Present Value falls in the range of \$291 million to \$308 million. If we are asked for a point estimate, we would recommend the midpoint of the range, \$300 million.

Choice of Discount Rates

As earlier defined, Efficiency Net Present Value is the aggregate of the net present value of the Efficiency Gains, determined at a market based discount rate commensurate with the risk associated with achieving the underlying cash flows over a specified term.

Assuming a constant term, the higher the discount rate the lower the Efficiency Net Present Value.

The rate appropriate for the discounting of the Efficiency Gains is between Superior's long-term debt rate (8.0%) and Superior's weighted average cost of capital (9.0%) on a nominal basis. This produces an Efficiency Net Present Value between \$291 million and \$308 million. See Appendix 4 for details of the computation and Appendix 5 for further discussion of the choice of discount rates.

Term of The Efficiency Value and Efficiency Net Present Value

The Efficiency Gains should be measured over the period during which they will reasonably be enjoyed. They reflect a strong and permanent operating paradigm. However, to be conservative,

the Efficiency Value and Efficiency Net Present Value have been quantified over only a 10 year period.

If a substantial prevention or lessening of competition is found and measured over a period longer than 10 years, then the period of quantification for the Efficiency Gains should also be discounted over the same time period to provide a relevant comparison.

SCOPE OF REVIEW

In preparing this report we have relied on the information listed in Appendix 3. The scope of our work can be briefly summarized as follows:

- meetings with Superior management;
- meetings with ICG management;
- meetings with Canadian Bond Rating Service; and
- consideration of relevant discount rates, rates of return and related market factors.

The planning, execution, and review of this report and the A.T. Kearney report benefited from the extensive involvement of both firms in both reports.

The following is a brief summary of the scope of A.T. Kearney's work, further details of which are contained in their report in Appendix 1:

- conducted site visits to observe and review business operations;
- interviewed site management and administrative staff;
- interviewed management at administrative centres and branch support centres;
- interviewed senior Superior and ICG management; and
- reviewed key planning documents and operational documents.

CONCLUSION

Efficiency Value

Efficiency Value is \$381 million to \$421 million. It is primarily a function of:

- the quantum of the individual Efficiency Gains; and
- the term over which the efficiencies will be enjoyed. For exemplary purposes we used 10 years.

Efficiency Net Present Value

Efficiency Net Present Value is \$291 million to \$308 million. It is primarily a function of:

- the same factors as above noted;
- the discount rate; and
- the timing within the specified term in which the efficiencies will be enjoyed.

The discount rates used range from 8.0% to 9.0%. These rates reflect the nature of the Efficiency Gains and market based rates of return assuming an inflation level of 2%. Appendix 4 shows the computation of the Efficiency Net Present Value. Efficiency Net Present Values under alternative discount rate assumptions are shown in Appendix 6 for illustrative purposes.

RESTRICTIONS

This report is not intended for general circulation or publication nor is it to be reproduced or used for any purpose other than that outlined above without our written permission in each specific instance. We do not assume any responsibility or liability for losses occasioned to you, or any other party as a result of the circulation, publication, reproduction or use of this report contrary to the provisions of this paragraph.

We reserve the right (but will be under no obligation) to review and/or revise any and all assumptions and/or calculations included or referred to in this report and, if we consider it necessary, to revise our opinion, comments and calculations in light of any information existing at the date of this report which becomes known to us after that date.

Yours truly,

Cole Valuation Partners Limited



Stephen Cole / Colin O'Leary

August 17, 1999

PRIVILEGED AND CONFIDENTIAL

Mr. Neil Finkelstein
Davies, Ward & Beck
Barristers & Solicitors
44th Floor
1 First Canadian Place
Toronto, Ontario
M5X 1B1

Dear Mr. Finkelstein:

Re: Commissioner of Competition v. Superior Propane Inc. et al

**Quantification of the Efficiency Gains Resulting from the Merger of
Superior Propane and ICG Propane**

INTRODUCTION

You have requested our opinion as to the quantum of Efficiency Gains that are likely to result from a merger of Superior Propane Inc. ("Superior" or "Superior Propane") with ICG Propane Inc. ("ICG" or "ICG Propane").

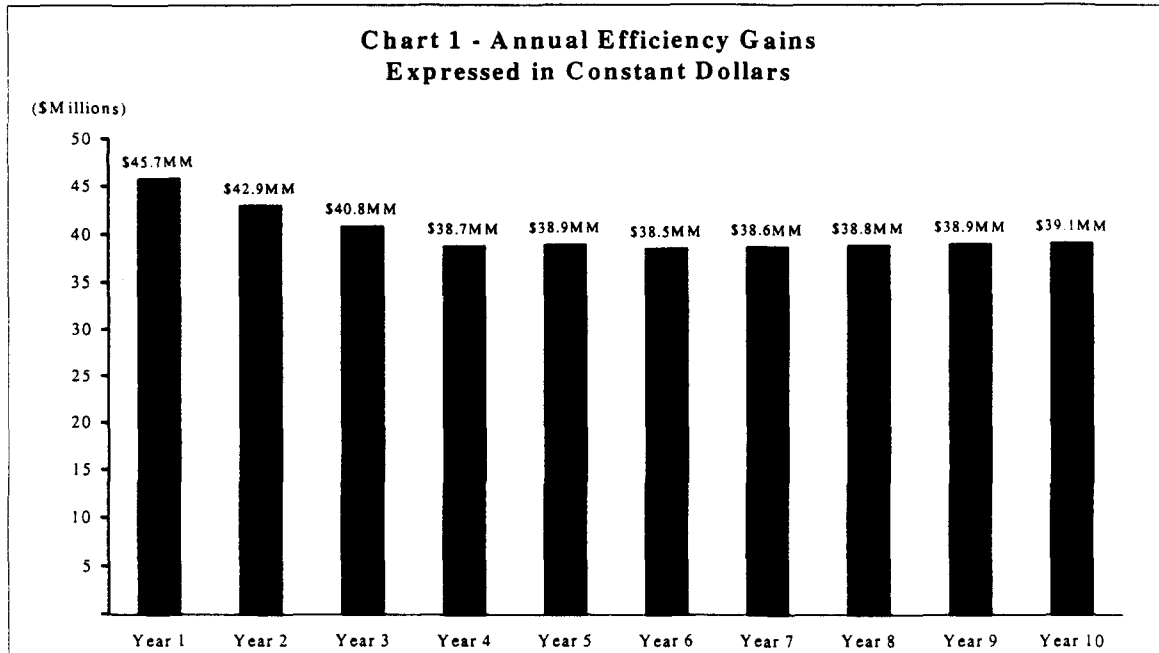
We understand that you require our opinion to determine whether, for the purposes of Section 96 of the Competition Act, the quantum of the Efficiency Gains will be greater than, and will offset the effects of, any prevention or lessening of competition that will result or is likely to result from that merger. We understand this report will be used for the purposes of filing with the Competition Tribunal in respect of an application made by the Commissioner of Competition regarding the merger of Superior and ICG.

Following in this report:

- The scope of work performed by A.T. Kearney in the course of developing the detailed assessment of the Efficiency Gains; and
- A detailed assessment of the Efficiency Gains by their functional and operating area.

SUMMARY CONCLUSION

In our opinion the merged organization is likely to realize a total of \$401 million in Efficiency Gains over the next 10 years, as shown in the chart below:



Cole Valuation Partners Limited have summarized the results of our analysis in their report, within which this report has been included.

The detailed analyses can be found at the following tabs:

| <u>Area of Operation</u> | <u>Tab Numbers</u> |
|--------------------------|--------------------|
| Corporate Centre | A1-11 |
| Customer Support | B1-4 |
| Field Operations | C1-10 |

In addition to total Efficiency Gains of \$401 million that we believe are likely to occur, we have included in Tab D our estimate of those Efficiency Gains, that while likely to occur as a consequence of the merger, have been excluded as we have not been able, at this stage, to quantify them with the same high level of confidence.

SCOPE

In preparing this report we have considered the information detailed in Exhibits 1 to 6. The scope of our work can be summarized as follows:

- interviews with Superior corporate leadership, general management and other corporate employees listed in Exhibit 1;
- interviews with ICG corporate leadership and general management listed in Exhibit 2;
- site visits to both Superior and ICG field locations, including accompanying delivery and service truck drivers on routes and interviews with field management listed in Exhibit 3 and 4 to observe and review the business;
- analyses and review of planning and operational data summarized in Exhibit 5;
- consideration of materials relating to the Commissioner of Competition's Application as set out in Exhibit 6.

Our corporate interviews included meetings with Superior's corporate leadership teams to understand the planned future operating model of the merged organization. We also met numerous times with both Superior and ICG management to review future plans that each would pursue if they continued to operate as separate companies in the future.

We have reviewed our methodology, analysis and findings contained in this report with Cole Valuation Partners Limited. This report and the Cole Valuation Partners Limited report reflect the extensive involvement of both firms. We confirm our concurrence with the Cole Valuation Partners Limited report.

The A.T Kearney team involved in preparing the analysis of Efficiency Gains includes (see Exhibit 7 for resumes):

- Paul Inglis, Vice President;
- Ronald Denham, Director;
- Eric Fergin, Manager; and
- James Tuttle, Manager

This above team is supported by:

- Naomi Gropper, Associate;

Mr. Neil Finkelstein
August 17, 1999

- Shakeel Bharmal, Associate; and
- Tiffany Foster, Business Analyst

RESTRICTIONS

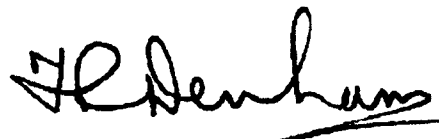
This report is not intended for general circulation or publication nor is it to be reproduced or used for any purpose other than for filing with the Competition Tribunal above without our written permission in each specific instance. We do not assume any responsibility or liability for losses occasioned to you, or any other party as a result of the circulation, publication, reproduction or use of this report.

We reserve the right (but will be under no obligation) to review and/or revise any and all assumptions and/or calculations included or referred to in this report and, if we consider it necessary, to revise our opinion, comments and calculation in light of any information existing at the date of this report which becomes known to us after that date.

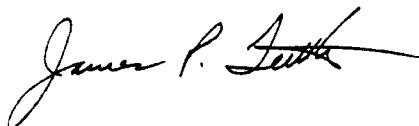
Respectfully yours,



Paul Inglis
A.T. Kearney



Ron Denham
A. T. Kearney



James Tuttle
A.T. Kearney



Eric Fergin
A.T. Kearney

**Superior and ICG
Exhibit 1
Superior Personnel Interviewed**

In preparing this report we have discussed Superior's current operations and future plans with the following individuals at the corporate centre:

Leadership Team

| | |
|--------------------|--------------------------------------|
| Schweitzer, Mark | President & Chief Operating Officer |
| Cooper, John W. | Vice President, Supply and Logistics |
| Kennedy, Cindy | Vice President, Information Systems |
| Robidoux, Kristine | Legal Counsel |
| Saabas, Paul | Vice President, Customer Service |

General Management and Other Corporate Positions

| | |
|----------------------|---|
| Balicki, Dave | General Manager, Western Operations |
| Bell, Howard | Fleet Analyst |
| Carroll, Andrew W. | Team Leader, Fleet & Infrastructure |
| Chayer, Dean | Business Analyst, Manitoba/Saskatchewan |
| Clough, Martin | Team Leader, Regulations Safety and Technical Support |
| Franklin, Juliette | Team Leader, Financial Reporting |
| Furtado, Albert | Regional Team Leader, Alberta & Northwest Territories |
| Kyle, Ron | Manager Supply |
| Luciani, Lyn | Human Resources Advisor – Western Canada |
| Miller, Rob | Engineering & Environment Coordinator |
| Nazarewich, Jim | Team Leader, ETI-Energy Transportation |
| Riess, Traci | Compensation & Benefits Advisor |
| Reisch, Theresia | Corporate Secretary |
| Ronneberg, Ronald A. | Treasury Consultant |
| Watson, Sandy | Corporate Administrator |
| Yont, Marcie | Property Administration |
| Zuberec, Stefan | Major Accounts Representative, Western Canada |

**Superior and ICG
Exhibit 2
ICG Personnel Interviewed**

In preparing this report we have discussed ICG's current operations and future plans with the following individuals at the corporate centre:

Leadership Team

| | |
|--------------------|---|
| Mackey, Geoff | President and Chief Executive Officer |
| Jones, Peter D. | Senior Vice President & Chief Operating Officer |
| Cherkas, Andrea A. | Director, Marketing & Supply |
| Sallows, Ken | Director, Human Resources |
| Steeves, Keith A. | Vice President Finance |

General Management

| | |
|--------------------------|--|
| Carey, Murray | Legal Counsel (left ICG on July 1, 1999) |
| Chaisson, Pierre | Business Services Leader |
| Foreman, Dale | Manager, IT Applications |
| Bussieres, Jean Francois | Facilities Manager |
| Fulkersen, Steve | Manager, IT Hardware |
| Gibbs, Paul | National Purchasing Manager, NGL Operations |
| Langner, Robert S. | Logistics Optimization Manager |
| Mann, Kenneth R. | Leader, Planning and Performance (Petro Canada employee) |
| McIntyre, Monte | Manager IT (left ICG on May 14 th , 1999) |
| Quinney, Robert | Senior Treasury Analyst |
| Sadleir, Robert | Controller |
| Williams, Rodger S. | Manager, Health Safety & Environment |

**Superior and ICG
Exhibit 3
Superior Field Staff Interviewed**

In preparing our report we interviewed the following individuals at Superior's field operations:

Vimont, Quebec

| | |
|---------------------|------------------------------|
| Charboneau, Richard | Regional Team Leader, Quebec |
| Couillard, Jacques | Bulk Delivery Truck Driver* |
| Trudel, Mario | Service Technician* |

Branch Support Centre - Vimont, Quebec

| | |
|---------------|-------------------------|
| Grenier, Yvon | BSC Team Leader, Quebec |
|---------------|-------------------------|

Mount Laurier, Quebec (Former ICG Site)

| | |
|------------------|-----------------------------|
| Gauthier, Claude | Bulk Delivery Truck Driver* |
|------------------|-----------------------------|

Stratford and Guelph, Ontario

| | |
|---------------------|-----------------------------|
| Froese, Gary | Branch Manager |
| Vendittelli, Carmen | Sales Person |
| Cook, Jerry | Bulk Delivery Truck Driver* |
| Boyd, Brian | Accounts Payable Clerk |
| Boucher, Lisa | Administrator |

Sudbury, Ontario

| | |
|----------------|-----------------------------|
| Calvank, Keith | Bulk Delivery Truck Driver* |
|----------------|-----------------------------|

Lloydminster, Alberta

| | |
|----------------|----------------|
| Dassiuk, Joe | Branch Manager |
| Hannah, Angela | Administrator |

Calgary, Alberta

| | |
|------------|----------------|
| Russo, Joe | Branch Manager |
|------------|----------------|

Branch Support Centre - Concord, Ontario

| | |
|------------|--------------------------|
| Ace, David | BSC Team Leader, Ontario |
|------------|--------------------------|

Coquitlam, British Columbia

| | |
|-------------|----------------------------|
| Dixon, Herb | Bulk Delivery Truck Driver |
|-------------|----------------------------|

* A.T. Kearney accompanied driver/technician on truck route.

**Superior and ICG
Exhibit 4
ICG Field Staff Interviewed**

In preparing our report we interviewed the following individuals at ICG's field operations:

Ontario C3 Operations:

Markham, Ontario

| | |
|-----------------|---|
| Paradis, Dave | General Manager, C3 |
| Murray, Jim | Operations Centre Leader, Metro Southwest |
| Richardson, Rob | Bulk Delivery Truck Driver* |
| Wilson, Jim | Service Technician* |
| Dehnke, Will | Operations Leader |
| Jackson, Cam | Operations Coordinator |

Stratford, Ontario

| | |
|--------------|-----------------------------|
| Jones, David | Bulk Delivery Truck Driver* |
|--------------|-----------------------------|

Sudbury, Ontario

| | |
|-------------------|-----------------------------|
| Williamson, Ernie | Bulk Delivery Truck Driver* |
|-------------------|-----------------------------|

Eastern C3 Operations

| | |
|-------------------|---|
| Normand, Francine | Customer Care Centre Leader, Eastern C3 |
|-------------------|---|

Prairie C3 Operations

| | |
|---------------|-----------------|
| Weychuk, Stan | General Manager |
|---------------|-----------------|

Western C3 Operations

| | |
|---------------------|------------------|
| Shoemaker, Gregg | General Manager |
| Badesha, Harbans S. | Business Analyst |

Lloydminster, Alberta

| | |
|-----------------|---------------------|
| Brian Maltby | Service Technician* |
| Lyàl Vallentgod | Operations Leader* |

Pacific C3 Operations

| | |
|------------------|-----------------------------------|
| Winters, Maurice | Business Services Leader, Pacific |
|------------------|-----------------------------------|

Burnaby, British Columbia

| | |
|----------------|-----------------------------|
| Attewell, Dave | Bulk Delivery Truck Driver* |
|----------------|-----------------------------|

* A.T. Kearney accompanied driver/technician on truck route.

**Superior and ICG
Exhibit 5
Information Reviewed By A.T. Kearney**

In preparing the report on Efficiency Gains the following types of documents were considered by A.T. Kearney:

- materials outlining Superior's and ICG's operations and plans as presented to their respective Boards of Directors in 1998 and 1999;
- Annual reports for Superior Propane Income Fund for fiscal years ended December 31, 1996 to 1998;
- ICG Propane Income Fund Initial Public Offering Prospectus dated May 29, 1998 (second amended preliminary version);
- Superior's and ICG's human resources data including information regarding salaries, benefits, incentives, tenure and overtime for 1998 for both union and non-union employees;
- Superior's and ICG's corporate cost centre budgets for 1998 and 1999;
- Superior's 1998 cash flow per branch;
- Superior's and ICG's supply practices including storage, transportation and distribution and delivery of bulk propane for 1998 and plans for 1999;
- Superior's and ICG's customer data including types of customers, volumes, and how propane was ordered for 1998;
- Superior's and ICG's 1998 fleet data including fleet utilization, types of vehicles and operating costs;
- information regarding Superior's and ICG's Information Technology plans and relevant costs;
- data available for Superior's and ICG's service work for 1998;
- Superior's and ICG's relevant asset inventory data including fleet and tanks;
- information regarding the operating costs and, where available, property values for Superior and ICG locations; and
- documentation regarding the Transaction Planning Team's work in preparing its draft business plan in the fall of 1998.

Superior and ICG

Exhibit 6

Review Of Materials Relating To The Commissioner of Competition's Application

- Memorandum from Davies Ward & Beck, dated August 4, 1998, to The Director of Investigation and Research, Competition Bureau regarding the Proposed Acquisition of ICG Propane Inc. by Superior Propane Inc.
- Submissions to the Competition Bureau by Davies, Ward & Beck, dated October 16, 1998 and November 16, 1998;
- Memorandum from Richard Schwindt to John Pecman, dated November 22, 1998, regarding Efficiency Gains revisions;
- Notice of Application, dated December 7, 1998, between The Director of Investigation and Research, and Superior Propane Inc., Petro-Canada, The Chancellor Holding Corporation and ICG Propane Inc., as amended;
- Response of Superior Propane Inc. and ICG Propane Inc., dated January 29, 1999 as amended;
- Reply to the Response of Superior Propane Inc. and ICG Propane Inc., dated February 12, 1999;
- Affidavit of Mark Schweitzer, dated December 3, 1998;
- relevant excerpts from examination for discovery of Mark Schweitzer on April 28, 29 and June 9, 1999.
- Answers to Undertakings provided by Superior Propane Inc. on the Examination for Discovery conducted of Mark Schweitzer, April 28, April 29 and June 9, 1999; and
- Continued Examination of Discovery of Mark Schweitzer dated July 5 and 6, 1999 and answers to undertakings provided by Superior Propane Inc. further thereto.
- Relevant examination for discovery of Geoff Mackey and Andrea Cherkas on May 11, 12, 13, and 14, June 2 and 3, and, July 12 and 13.

**Superior and ICG
Exhibit 7
Resumes of A.T. Kearney Staff**

Paul F. Inglis, M.ENG, B.ENG
Vice President

Mr. Inglis is a Vice President in the Americas Operations Practice of A.T. Kearney based in the Toronto office. Mr. Inglis has a Masters of Engineering (Transportation Planning) and a Bachelor of Engineering (Civil), both from McMaster University.

Selected Experience

Business Strategy

- *Canadian Telecommunication Company.* Identified the opportunity to improve productivity through an enhanced supply chain. Assessed the purchasing efficiencies, identified the potential for greater purchasing opportunities and assessed the ability to improve efficiency in field operations. The program indicated a \$50 million annual opportunity.
- *Third Party Logistics Company.* Identified the market for their services in the Canadian business community. Conducted customer interviews, assessed competitor capabilities and recommended the priorities for business development.
- *Communications Company.* Assisted management to develop a long-range business plan. The plan included market forecasts, network demands, operational plans, organizational plans and financial pro-formas for a five-year period. The document was subsequently used to acquire financing in support of network expansion.
- *Carrier Company.* Investigated the potential for 3rd party (contract) logistics. The study involved a review of Canadian demand for such services, an analysis of competitor strengths and weaknesses and identified the key success factors as an implementation for the business opportunity.
- *National Parcel Corporation.* Acted as network design advisor to a task force charged with developing future marketing and strategic operating plans. Participated in market identification, service standards development, facilities development proposals, equipment specification and material handling strategy development.
- *Ontario Government.* Developed a business plan for a ferry service between Ontario and Ohio operated by the Ontario government. Reviewed the market, prepared forecasts of ridership, developed new schedules, revised the organization and produced pro-forma financial statements to forecast the expected deficit position. Recommended deficit sharing agreements, rates to be charged and evaluated a range of management structures.

Paul F. Inglis

Post Merger Integration

- ***Specialty Chemicals Manufacturer and Distributor.*** Worked with the senior executive team to merge the independent strategic business units into one line of business structure. Involved the restructuring of a regional organization of manufacturing, distribution, sales, finance and administration into a focused industry line of business organization with a centre led structure. Resulted in a 15% reduction in manpower.
- ***Industrial Products Manufacturer.*** Established a merged services organization for a multinational company operating in North America, Europe and Asia. Centralized the finance, human resources, information technology and procurement organizations to better deliver a more consistent support processes while reducing the amount of labour required. The project involved the rationalization of a number of individual information technology platforms to one common software package.

Logistics Strategy – Network Distribution

- ***Home Building Materials Manufacturer.*** Evaluated the various channels of distribution to determine the most effective and profitable combinations of product lines and channels. The model developed for this project addressed the options for sourcing from five different plants, transporting by rail or road, selling through agents, distributors or owned facilities. It recognized discount rates and commissions paid through the various channels.
- ***Provincial Utility Company.*** Evaluated the network of materials, storage and distribution for components used to develop and maintain the local distribution systems. The project involved the evaluation of two and three tier options and the determination of the most appropriate location for each of the regional distribution centres using a computer model. The project included the evaluation of a “Prepack” concept and resulted in planned reductions of inventory by approximately 25%.
- ***Waste Management Company.*** Developed a collection system strategy. The project reviewed the demand for waste collection by product group and evaluated a number of strategies for consolidation, dewatering, compaction and blending to minimize transport volumes and thus collection costs. The strategy evaluated various ownership options for each of the components of the collection system.
- ***Ottawa Dairy.*** Evaluated the local distribution system using computer simulation. The study resulted in a 35% reduction in delivery costs while providing customers with a higher level of service.
- ***Dairy Processing Plant.*** Evaluated the impact on distribution costs of consolidating two dairy processing plants into one new facility. Routes were evaluated on the basis of time costs and distance costs, with sensitivity to delivery size and vehicle capacity.

Paul F. Inglis

- *Distribution System Rationalization.* Recommended the rationalization of a distribution system of seventeen facilities to five strategically located facilities. Consideration was given to delivery fleet and line-haul fleet cost trade-offs, and facility manpower costs as well as capital requirements. A computer model was used to determine the optimal system.
- *West Coast Dairy.* Developed a distribution model for a west coast dairy which allows the company to fine-tune the delivery system. The project included data base development, training and model execution.
- *Canada's Largest Distribution Company.* Developed and evaluated long-range plans for networks to service the company's needs. Assessed the client service requirements, the resources utilized and locational considerations to recommend a staged program of facility and transportation improvements that reduced handlings, and improved efficiency and the real property asset base over a ten-year period.
- *Courier Company.* Evaluated the national network of facilities and transportation required over the next ten years. Evaluated various strategic approaches, using an operational model. Recommended major changes that would allow the corporation to provide the highest level of service in Canada while minimizing network costs.
 - Assessed the opportunities for savings in express shipments through modal changes in response to the weekend time window availability. Evaluated the operational effects of using surface transportation for express shipments dispatched on Fridays while using air lifts for other days. Implementation resulted in over \$500,000 annual reduction in transportation costs.
 - Designed a shuttle system for interchanges of product among nine plants in a timely manner using paired-point analysis to ensure service capability. This resulted in fewer dispatches and, thus, less material handling and increased dock capacity.
- *Airline Company.* Undertook a "value for money" evaluation of the air freight operations, aircraft maintenance operations, fuel and parts purchasing and control operations and ground services management. Reviewed each of the operations for effectiveness and efficiency and, through this diagnostic, recommended a number of strategic changes.

Paul F. Inglis

Logistics Strategy – Supply Chain

- *Global Consumer Products company.* Conducted logistics strategy and implementation projects in New Zealand, South Africa, Canada and the United States. Developed their global approach, trained their staff and developed benchmarks.
- *Major Food Consumer Products Company.* Re-engineered the supply chain processes going to market through multiple channels including direct store delivery and warehouse direct. Identified opportunities to significantly reduce cost while improving customer service and reducing capital invested.
- *West Coast Department Store Chain.* Evaluated the options for servicing the retail stores. The project included the development of a logistics model and application of the model to a number of different distribution options. The study resulted in the closing of two regional warehouses and significant reduction in the inventory of stock.
- *National Baker.* Evaluated the bread, rolls, sweet goods and cake capacity and recommended a new manufacturing and network for distribution. The project included the modeling of the manufacturing capability on a line by line basis including the cost of sourcing raw materials and of distributing the product through a network of depots. The project recommended the closing of several plants and a number of depots.
- *Electronics Distributor.* Undertook a logistics strategy evaluation. The project identified the various costs and components of the logistics system and, from this base, several projects were undertaken to address savings in each of the areas recognizing the overall logistics impact. Sub-projects included; a review of the organization, direct manufacturer to depot shipping, renegotiation of transportation rates, redesign of the central distribution centre and introduction of automated techniques. The project also implemented productivity measurement for the distribution centre staff and the drivers as well as the regional depot staff. The project resulted in annual savings of over \$200,000 in the first year.
- *Ontario Trucking Association.* Undertook a study for the role of truck transportation in the Ontario economy. The project resulted in the widely distributed publication “Ontario Moves by Truck”.

Facilities Planning

- *Major Municipal Utility.* Analyzed the options for development of the facilities network to support maintenance and expansion of the distribution system. The project involved evaluating required facilities, developing the functional needs and specifying the most appropriate location to service the over 250,000 customers.
- *A Ministry of the Ontario government.* Evaluated the need for, and appropriate components to be included in, a customer service centre to be created when the Ministry head offices

were relocated from Toronto. Undertook interviews with a large number of clients to determine their future needs and current satisfaction with the service and interviews with program staff to determine their perception of the customer needs. Identified the key elements of the programs that must be represented for “face to face” contact and developed three options for different levels of sophistication. Recommended the implementation of a customer service centre, identified the best location and specified the size of the various components.

- *Major Parcel Processing Centre in Toronto.* Developed user requirements, space requirements and facility specifications. The assignment included evaluation of automation options, development of processing/management strategies, dock utilization profiles and vehicle storage needs.
- *Province of Alberta Distribution Centre Facilities.* Prepared a rationalization plan that resulted in the elimination of eight distribution centre facilities in the Province of Alberta. One new facility was developed in Edmonton, which reduced the manpower and storage requirements, while concurrently reducing transportation costs by more than \$400,000. A major contribution was the development of a methodology for future similar projects.
- *Public Hydro-Electric Utility.* Assessed the requirements for their vehicle fleet and space to house maintenance and construction operations. Undertook a diagnostic of current vehicle usage, specifications and maintenance; reviewed growth potential; and recommended a development program for the organization, fleet and facilities.
- *Major Publisher.* Evaluated the sizing and equipping of the new distribution centre. Evaluated material handling and storage system options, prepared functional specs, sources and recommended selection of suppliers.

Customer Service

- *Original Equipment Manufacturer Of Heavy Trucks.* Undertook a project to identify the level of satisfaction of the dealership network and of the customers. Used a combination of person to person interviews and telephone questionnaires to identify the level of satisfaction and requirements for future services. Recommended a program of revised marketing emphasis and actions to improve the company dealership interface.
- *Edible Fats Manufacturer.* Conducted a customer service seminar to raise the awareness of senior executives and develop a common customer service strategy. The study included a retreat of all of the functional senior executives to enable a free exchange of ideas resulting in a consensus on the customer service approach of the company.
- *Food Manufacturer.* Took a survey of major customers to determine the level of satisfaction with all aspects of the product, product sales and service, logistics aspects and the culture of the company.

Paul F. Inglis

- *Chemical Company.* Worked with a special task force to develop the most appropriate customer service standards for distribution of products to the various market segments. Developed the program to evaluate the capability of the current network to satisfy the service level requirements.

Materials Management

- *Containerization Protocol.* Developed a protocol for containerization for the transport of parcels, depending upon shipment size, distance, handling requirements and destination facility capability. The study resulted in a \$5 million containerization program.
- *Delivery System.* Assessed the materials handling procedures for a delivery system involving more than 200 routes. Recommended procedural changes that resulted in a 5% reduction in time to complete the route duties. Return on investment was less than one year.
- *Canada Post Corporation.* Assessed the viability of lightweight containers for the movement of mail nationally and internationally. Managed a project to evaluate alternative materials and designs, conduct prototype testing and implement the program. First year savings estimated at \$500,000.
- *Cosmetics Manufacturer.* Assessed the impact of various handling options on the sizing of warehouses and levels of inventory.
- *Departments of the Government of Saskatchewan.* As part of a major review, an operational audit was conducted of the Central Vehicle Agency, Mail Services, Printing Services, Telecommunications Services, Photographic Services and Air Services. On a second review, evaluated the material management practices of the Government of Saskatchewan including purchasing, warehousing, order processing and distribution.

Warehousing Projects

- *Major Publisher.* Managed the strategy to consolidate two shipping facilities into one distribution centre to serve Canada. The project included the evaluation of current order processing practices and the development of a transition plan. Specific tasks included the identification and elimination of obsolete inventory, the evaluation of the best layout for the selected facility, and evaluation of the most appropriate racking, conveyors and mobile equipment, changes to the picking and packing methods.
- *Book Distributor and Publisher.* Evaluated the practices in their existing warehouse and recommended changes to the layout and shipping methods. Of particular concern was the method of handling returns in an expeditious manner. Major changes were made to enable this company to operate with a 30% increase in volume from a facility that they had previously considered to be at capacity.

Paul F. Inglis

- *Major International Book Distributor and Publisher.* Evaluated their organization, evaluated their inventory management practices, recommended changes for picking and packing and assisted them to consolidate three operations into a new distribution centre. The transition plan involved working with the architect to ensure that the building was functionally well designed, identifying the functional specifications for equipment, identifying sources and evaluating the proposals for the supply of equipment.
- *Computer Distributor.* Developed the layout of an 80,000 square foot warehouse. The project required the coordination of the interests of three functional groups and the analysis of operational needs for racking/shelving, carousels, flow racks conveyors, mobile equipment, mezzanines and all other miscellaneous equipment.
- *Hardware Distributor.* Developed a simulation model which gave a visual interactive picture of the various picking strategies and inventory location options. For the same distributor, identified means to improve the quality of shipping in terms of accuracy of pick, minimizing loss and damage and means to prevent and monitor the quality through statistical process control methods. A third project introduced a gain sharing program to encourage the improvement in the quality of shipping.
- *Electronics Distributor.* Evaluated the operation of the warehouse. The warehouse was a combination of finished goods and spare parts. The finished goods area layout was revised and new racking systems installed. New processes were implemented and productivity measurement of each of the warehouse functions was installed. A stock locator and stock control system was installed. For the parts system, a carousel system was selected and managed through installation. Specifications were developed for a mezzanine, the supplier selected and supervision of installation completed.

Publications

- Co-author of a book “Profitable Logistics Management” published in 1989. Authored chapters on Transportation, Purchasing, Customer Service and Order Processing.
- Primary author and editor of a publication of the Roads and Transportation Association of Canada, “The Treatment of Roadside Hazards”, January 1979, Ottawa.
- Regular columnist for Purchasing Management, contributing the “Ask the Experts” page to each issue.

Author of the following papers:

- “1998 Outlook on The Global Business Environment” Canadian Association of Logistics Management, Toronto, January 1998

Paul F. Inglis

- “Leveraging Strategic Advantage; Best Practices of Today’s Procurement Leaders” Modern Purchasing, April 1998
- “The Perfect Order – A Framework for Improving Customer Service Through Trading Partner Relationships” 1997 Food Industry Productivity Convention, Philadelphia, October 1997
- “Warehousing Opportunities” The Canadian Book Publishers Council, Toronto, November 1988
- “Partners in Customer Service” The Canadian ECR Conference, Toronto, September 1997
- “Leading Edge Practices in Logistics” The 1997 Executive Development Program, York University, June 1997, Montreal, P.Q.
- “JIT in Logistics: Winning the War on Waste” Institute of International Research Total Logistics Strategy Conference – October 1988, Toronto
- “Purchasing and Free Trade: Tapping the Profit Potential” – International Institute of Research 2nd Purchasing Conference January 1989, Toronto
- “Just-in-Time Purchasing Supplier Cooperation in the Manufacturing Process” Institute of International Research – Supplier Partnership Conference March 1989, Toronto
- “Satisfaction from Service: The Logistics Solution” Canadian Housewares and Hardware Association July 1989, Toronto
- “Supplier Cooperation for Material Gain” Canadian Cosmetics Toiletries and Fragrances Association, November 1989, Toronto
- “Preparing for Vendor Partnership” Purchasing Management, January 1990, Toronto
- “Global Sourcing; A Major Cost Reduction Initiative” International Institute for Research January 1990, Toronto
- “Strategic Planning in the Transportation Industry”, Ontario Trucking Association Annual Conference, November 1987, Toronto
- “Delivery Vehicle Scheduling and Route Engineering”, Paper presented at Transpo '83, May 1983, St. Louis
- “Application of Computer Modelling to Goods Distribution”, Paper presented to the W.E. Long Bakers Convention, September 1982, Chicago
- “Development of the Canadian Highway Database”, Canadian Transportation Research Forum, May 1982, Montreal

Paul F. Inglis

- “Treatment of Roadside Hazards”, presented at the Roads and Transportation Association of Canada, September 1979, Ottawa
- “Commercial Vehicle Accident Database”, RTAC, September 1978, Ottawa
- “The Economic Impact of Reduced Speed Limits in the Toronto-Montreal Corridor”, RTAC Forum, November 1977, Ottawa
- “A Time Lapse Aerial Photography Application to Traffic Surveys”. Traffic Engineering and Control, January 1975, London
- “A Multimodal Logit Model of Modal Split for a Short Access Trip”, HRRR447, 1973, Washington

Professional Affiliations

- Association of Professional Engineers of Ontario
- Member of the Business Advisory Committee of McMaster University
- Former President of the National Capital Section of the Institute of Transportation Engineers
- Past President of the Canadian Association of Logistics Management
- Member of the Council of Logistics Management

F. Ronald Denham, B.Sc., Ph.D., M.B.A., F.E.I.C., FCMC, P.ENG.

Director

Dr. Denham is a Director of A.T. Kearney Canada, management consultants. He is the Canadian member of the Supply Chain Integration Core Team and specializes in supply chain, logistics and operations strategies.

A graduate of the University of Durham, England (B.Sc.,Ph.D.) in applied science and the University of Buffalo (M.B.A.) in business administration, he is a recognized Canadian authority on logistics management. He has specialized in applying the scientific approach to a wide variety of problems in the public and private sectors, for domestic and foreign clients, and has presented numerous papers and written many articles in this field. He is joint author of the leading Canadian logistics texts "Distribution Management Handbook" (1980) and "Profitable Logistics Management" (1989).

Prior to joining A.T. Kearney Ltd., Dr. Denham was Vice President of Peat Marwick Stevenson & Kellogg, management consultants, leading Canada's largest logistic and operations management practice. He previously held technical and managerial positions with the Defence Research Board, Ford Motor Company of Canada, Lucas Rotax Ltd., and Union Carbide Canada Ltd. where he was Superintendent of Engineering Maintenance.

He has also been closely associated with the Faculty of Administrative Studies, York University, since its inception. During its first two years, he lectured in Management Science. Subsequently, he was appointed Professor with responsibility for coordinating all aspects of the Management Science program. More recently, he has continued to present a number of management seminars through the Executive Development Division. In addition he is a frequent lecturer and seminar leader at the Universities of McGill, Concordia, Toronto and British Columbia.

In consulting since 1961, Dr. Denham has conducted a wide range of assignments in North America and abroad, in public and private sectors, focusing on logistics, transportation and operations management.

Dr. Denham has been active in a number of professional bodies, including: the Engineering Institute of Canada (Chairman), Institute of Certified Management Consultants of Ontario, (President), Institute of Management Sciences and the Canadian Operational Research Society. He was a founding member of the Canadian Association of Logistics Management.

He is also very active in the community. He served for five years as Trustee of the North York Board of Education. He is also a Past District Governor (1993-94) of Rotary International.

Selected Experience

Logistics and Operations Strategy

- *Soft Drink Beverage Manufacturer – Logistics Strategy.* Led a multi-disciplinary team evaluating alternative distribution strategies for the largest Australian soft drink manufacturer. Scope of the work included reviewing customer requirements, rationalizing distribution centres, consolidating manufacturing facilities and rationalizing production, alternative sourcing of packaging materials.

The project also required an assessment of organizational and informational implications.

- *Soft Drink Beverage Manufacturer - local delivery strategy.* This company was concerned about delivery costs from its Toronto distribution centre. Our work included the evaluation of alternative numbers and locations, assessing shipping department operations and redesigning delivery routes.
- *Brewery - redesign of distribution system.* A major Quebec-based brewery wished to redesign its distribution system from the brewery to final resellers. Work included: evaluating alternative locations for the distribution centre, analyzing costs and effectiveness of pre-selling vs. route salesman, and redesigning delivery routes.
- *Biscuit Manufacturer - supply chain redesign.* This project defined a breakthrough vision for processing and delivery to store-door. The work covered sales, order fulfillment, stock replenishment, inventory management and raw material acquisition.
- *Tobacco Products Manufacturer - developing an integrated strategy.* This project integrated the flow of information and goods from the supplier of board (for packaging) through the lithographer, cigarette manufacturer to the final distributor.
- *Major Department Store - logistics strategy.* The work included selecting locations for distribution centres, routing of merchandise for 34 different departments, deployment of inventories and rationalization of operations.
- *Petrochemical Products Manufacturer - leading an A.T. Kearney/client team to reengineer and implement supply chain processes.* Covered planning, sales forecasting, inventory deployment, production scheduling and railcar dispatching. Tangible results included major improvements in forecast accuracy, significant reduction in inventory levels and lower production transition costs.
- *Petrochemical Processor - logistics strategy.* An evaluation of the total supply chain for a major producer of low density polyethylene. The project covered customer service requirements, customer inventory management, routing, dispatching and monitoring of a

F. Ronald Denham

- 1200 car fleet and production planning at the refinery. Improved customer service and much lower logistics costs resulted.
- *Major oil company - logistics strategy.* This project examined the processing of packaged oil products from the recipient of bulk raw material to the dispatch of packaged, palletized goods to the customer. The work embraced production planning, inventory management, warehouse operations and shipping.
- *A large packaging manufacturer - logistics operations.* Study of distribution and transportation operations for a large packaging manufacturer. Areas studied included costs of delivering customer orders from each plant, costs of moving products between plants and opportunities to serve some clients from alternative plants.
- *Building Materials Manufacturer - rationalization of distribution centres.* This project included the determination of customer service requirements, identification of alternative D.C. locations, estimation of costs including transportation, handling, inventory and delivery, and determination of the impact of alternative D.C. configurations on customer service.
- *Building Materials Manufacturer - distribution strategy.* A review of production and distribution strategies for a major Canadian manufacturer of wallboard and related materials. The project evaluated alternative sourcing and distribution patterns as well as production management systems.

Mergers and Cooperative Synergies

- *Pharmaceutical Manufacturers Association of Canada - feasibility of pooling.* Reporting to a steering committee of manufacturers and wholesalers, we evaluated the potential improvement in costs and service of pooling transportation, warehousing, local delivery or information processing operations. The study was based on a comprehensive study and collection of data from 12 firms representing all aspects of pharmaceutical manufacturing and distribution.
- *Pharmaceutical Manufacturer - evaluation of distribution strategy.* As a result of a merger, this company was using both direct and wholesale channels. We were engaged to evaluate the costs and effectiveness of both systems and recommend the most effective. The project embraced order processing, warehousing, transportation, inventory and local delivery and selling activities.
- *Government of Saskatchewan – logistics of grain movement.* Dr. Denham led a multi-consultant team to evaluate alternative grain supply chains from farm to ocean carrier. The project included a study of best practices in other countries, identification of non value-adding activities and a focus on customer' requirements. The result – definition of a J.I.T. system from farm to carrier that reduced logistics costs by 42%.

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- *Government of Canada, Supply & Services – design of logistics system.* Prior to this project, each department of the Canadian Government managed its own supply system - purchasing, acquisition, transportation, storage, inventory management and delivery to point of use. We conducted a preliminary study to test the feasibility of all non-military supplies being handled by one central agency. Following that initial project we were retained to design the central supply system within the Capital Region.
- *Soft Drink Manufacturer – merger efficiencies.* This beverage company was growing through acquisition. At the time of our project the company had 10 manufacturing plants and 57 distribution centres. We evaluated a number of alternative scenarios for consolidation and rationalization including streamlining the product line. The company adopted a strategy of 6 manufacturing facilities and 11 distribution centres.
- *Food Manufacturer – acquisition strategy.* This client was negotiating the acquisition of a major food manufacturer. As input to the strategy we estimated the value of the target company and identified likely synergies with the parent.

Transportation Efficiency and Cost Reduction

- *Canada Post – negotiating intermodal rates.* Technical support was provided to Canada Post in evaluating its inter-modal transportation contracts with carriers. A negotiating strategy was prepared and assistance provided in negotiating the renewal of a \$40 million contract with Canadian National and Canadian Pacific Railways. As a result of the rate reductions achieved in the negotiations, a \$3.5 million per year savings was obtained.
- *Canada Post – negotiating air mail contracts.* On behalf of Canada Post Corporation, negotiations with both large and small air carriers were conducted for air mail services. In preparation for the negotiations, detailed cost and tariff studies were conducted to develop target rates. Both charter and unit toll services were negotiated. In several cases, with isolated northern carriers, the difficult qualitative trade-off of cost vs. socio-political impact had to be assessed. Negotiations were conducted with four Canadian regional air carriers and twelve local carriers.
- *Canada Post – evaluating transportation contracting.* As a result of deregulation in the U.S., transportation procurement methods and strategies were evolving. We reviewed transportation contracting developments in 11 major North American companies. Included in the review were findings and conclusions regarding types of contractual arrangements, contracting organization structure, and management systems.
- *Canada Post – for preparing air transportation contracting policies.* Due to the reorganization of Canada Post as a Crown Corporation, a new air transportation policy was required. Corporate objectives, aviation industry characteristics and government regulations were all considered in the development of a new air transportation contracting policy for Canada Post.

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Business Strategy

- *Pharmaceutical manufacturer – marketing Strategy.* The patented drug on which this company depended for 50% of its revenue was due to lose its patent protection. Dr. Denham directed a project to identify and evaluate alternative ways of getting the product to the consumer, while ensuring minimum loss of share and contribution.
- *Indian Manufacturers – American Marketing Strategy.* This Project studied the potential for the export of a number of products, including builders' hardware, from India to America. The study included: an assessment of the manufacturing capability, identification of potential customers and marketing channels, and the preparation of an entry strategy.
- *Chinese manufacturers – Export Strategy.* This project assisted a number of Chinese manufacturers of builders hardware and building products to determine the best strategy for exporting to North America. The work covered product design, manufacturing capability, transportation marketing channels, pricing and promotion strategies.
- *Building Materials manufacturer – market strategy.* A project to evaluate the costs and added contribution of switching from the use of wholesalers to direct selling and distribution.
- *Major U.S. Bank - Canadian market entry strategy.* This highly successful midwest U.S. bank had developed a comprehensive business in the agricultural and electronic sectors. We evaluated the likely effectiveness of this strategy in Canada and identified a number of strategic options.

Economic and Impact Studies

Dr. Denham has conducted and/or directed a number of economic and socio-economic studies for domestic and foreign clients including:

- *Soft Drink Industry – economic impact of returnable containers.* This was one of several projects directed by Dr. Denham on the impacts of returnable beverage containers. The work included the definition of the entire supply chain, determining flows at every point, estimating employment and costs at every point in the system.
- A UNIDO-sponsored economic development project in Ghana involving a study of domestic and export markets, an assessment of human and material resources, and preparation of a long-term growth plan.
- Developing an approach for a feasibility study of an integrated irrigation-agricultural development project for the Dep River Basin in Nigeria.
- Preparation of a World Bank project for the Greek horticultural industry.

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- Study of the economic feasibility and preparation of plans for a fish meal and fish oil plant in Yemen.
- A long-term development strategy for the Cuban citrus industry.
- Determination of the value of a Canadian railway.
- Study of the socio-economic impact if the federal government banned certain aerosol products containing fluorocarbon propellants.
- Review of horse racing in Ontario for the Ontario Racing Commission. Study included many areas: breeding, new legislation, marketing and racing date allocations.
- Assessment of opportunity and issues in capital projects exporting for a federal government agency.
- Study for the federal government, conducted to develop mechanisms by which funds might be directed to forest management and to identify implications of each mechanism.
- A major regional socio-economic impact study, completed for Nova Scotia. The work involved the description of the requirements for various gas discovery/delivery scenarios.

Publications

- “Integrated Logistics Management”, Purchasing Management Association of Canada, Annual Conference, June 1999
- “Structuring the Supply Chain to Maximize Shareholder Value”, Conference Board of Canada, Council on Logistics, April 1998
- “Opportunities for Modular Containers in the Canadian Grocery Industry”, Grocery Products Manufacturers of Canada, May 1998
- “Supply Chain Performance Metrics”, Institute for International Research, September 1997
- “Supply Chain Integration: A CEO Perspective”, Purchasing Management Association of Canada, Seventh Annual Program, March 1996
- “Improving the Efficiency of Grain Handling and Transportation”, Western Canadian Wheat Growers Association, January 1996
- “Vendor Managed Inventory – Creating Logistics Value”, Logistics Quarterly, March 1996

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- “Facing the Forces of Change – 2000”, Annual Conference of Canadian Institute of Plumbing and Heating, May 1995
- “Grain Transportation and Handling in 2005”, Western Transportation Advisory Conference, March 1995
- “The Supply Chain as seen by the CEO”, Council of Logistics Management Annual Conference, San Diego, October 1995
- “The Revolution in Marketing and its impact on Logistics Strategy”, Canadian Association of Logistics Management, Vancouver 1995
- “Supply Chain Integration”, The Canadian Council on Logistics, March 1995
- “Distribution – the next wave”, Annual Conference of the Canadian Wholesale Drug association, June 1992
- “Canadian Reaction to Globalization”, Canadian Association of Logistics Management, April 1990
- “Distribution Patterns - Rethink, improve profits”, Food in Canada, May 1982
- “Measure Distribution in Times of Uncertainty”, Canadian Transportation and Distribution Management, November 1981
- “Physical Distribution: get it all together”, Canadian Transportation and Distribution Management, January 1981
- “The Integrated Distribution Concept”, The Business Quarterly, Winter 1979
- “Measure Distribution's Performance”, Canadian Transportation and Distribution Management, November 1977

Eric Fergin, B.Sc., M.B.A.

Manager

Mr. Fergin is a Manager in the General Practice of A.T. Kearney, based in the Toronto Office. A graduate of INSEAD with a Masters in Business Administration (France) and a B.Sc. (Physics) from the University of Waterloo, he specializes in supply chain integration, procurement, operational effectiveness and transportation.

Prior to joining A.T. Kearney, Mr. Fergin managed a 40 person production team at a consumer products manufacturing operation.

Selected experience

Supply Chain - Logistics Strategy

- *Government of Saskatchewan - Grain logistics strategy.* A multinational consultant team evaluated alternative grain supply chains from farm to ocean carrier. The project involved an assessment of international best practices, identification of non-value adding activities and a focus on customer requirements. The result was the definition of a number of alternative systems that improved efficiency, including a JIT system from farm to carrier that reduced logistics costs by 42%.
- *U.S. Electronics Manufacturer - Supply Chain Diagnostic.* Determined supply chain cost reduction opportunities for an \$18 billion company. Identified manufacturing facility rationalization and consolidation opportunities across business units, spanning worldwide facilities. Determined opportunities for annual cost savings of \$1.5 billion and asset reduction of \$1.0 billion.
- *Canadian Tobacco Products Manufacturer - Supply Chain Integration.* As part of a major supply chain integration and cost reduction project, surveyed and interviewed wholesale and retail customers to determine downstream distribution and consumer requirements. Modified clients' distribution practices to meet these future requirements.

Procurement

- *Canadian Bank – Procurement.* As part of A.T. Kearney-led company-wide procurement initiative, led client teams in focusing on telecommunications, and contract technical staff. Researched and analyzed supplier industries, qualified and evaluated existing and alternative suppliers. Reduced long distance voice telecommunications costs 40% saving \$6 million annually. Reduced spending on contract technical staff by 12%, saving \$2.4 million annually.

Eric Fergin

- *U.S. Consumer Products Manufacturer – Procurement.* As part of an A.T. Kearney - led company-wide procurement initiative, led a client team focussing on distribution including transportation and warehousing. The team researched and analyzed supplier industries, qualified and evaluated existing and alternative suppliers. We reduced truckload transportation costs 11%, saving \$13 million annually.
- *Canadian Forest Products Company - Transportation Opportunity Assessments.* Determined transportation cost savings for trucking and rail transportation modes, both internationally and domestically. Identified an \$11 million savings potential and key areas of opportunity.
- *Canadian Construction Products Manufacturer - Transportation Opportunity Assessment.* Determined truck transportation cost savings opportunity for domestic freight movements. Benchmarked against best practices to identify substantial savings in a number of test lanes.

Strategy

- *U.S. Retailer - Strategic Assessment.* Evaluated the strategic position of the client's home service, maintenance and repair division. Interviewed and developed comparative cost structure models for the division versus its competitors, including the manufacturer and small independent level. Determined areas where client had a decided competitive advantage in service, venue, type, and product. Identified areas of focus for business sustainability and growth.
- *U.S. Glassware Manufacturer - Competitive Threat Analysis.* Assessed potential U.S. market entry threat posed by Mexican, French and Indonesian competitors. Developed comparative cost structures and assessed target market segments.

Business Process Redesign

- *U.S. Retailer - Budget Process Redesign.* Reengineered budgeting and planning process to reduce number of iterations and overall time to complete annual process. Set up progress against actual review process. Saved \$26 million in corporate budget.

James P. Tuttle, M.B.A., M.S., BA
Manager

Mr. Tuttle is a Manager in the General Practice of A.T. Kearney Ltd., based in the Atlanta office. He has a Masters in Business Administration from the Wharton School, University of Pennsylvania (Palmer Scholar); a Masters of Science (Taxation) from the University of Houston, Texas; and a BA from Baldwin - Wallace College (Accounting and Finance). He specializes in sales force effectiveness and customer service, information technology, and organizational strategy.

Prior to joining A.T. Kearney Ltd., he founded his own CPA practice, specializing in tax implications of mergers and acquisitions and new market entry. Mr. Tuttle also owned and operated his own retail operation.

Selected experience

Sales and Marketing Effectiveness

- *Fortune 100 Telecommunications Company.* Led a three-person consulting team in designing sales force effectiveness policies for entering South America.
- *Building Products division of a Large International conglomerate.* Redesigned the marketing capability, allowing them to become more customer-focused.
- *Fortune 100 Courier Company.* Analyzed the market feasibility of initiating a new service offering.

Organizational Strategy

- *Fortune 100 Automotive Company.* Assisted in designing the organizational model and operating principles to incorporate an acquired electronics capability into its multi-division operation.
- *Market-leading International Courier Company.* Led a four-person consulting team in redesigning the operating model to better align to the key processes of a 4,000-employee division.
- *Fortune 100 Overnight Delivery Company.* Led a ten-person client team; implemented initiatives in call handling procedures, skill-based call routing, hiring and training for a 2500 employee customer service division.
- *Fortune 100 Computer Services Company.* Led a four-person consulting team implementing a 31-account, 3,000-employee Shared Services pilot. Also contributed significantly to the development of the Shared Services blueprint.

James P. Tuttle

- *Large U.S. Electric Utility.* Evaluated the transmission/distribution engineering processes and made recommendations for the re-design of key business process.
- *Global Professional Services Firm.* Led a four-person team in assessing the recruiting strategy and developed recommendations to increase the quality and quantity of new hires.

Information Technology

- *Fortune 100 Courier Company.* Led a four-person team in redesigning IT service offerings focusing on the requirements of internal customers.
 - Assessed revenue loss from automated order processing devices.
 - Led a ten-person client team for implementing initiatives in call handling procedures, skill-based call routing, hiring and training.
 - Analyzed customer contact strategy and evaluated cross-functional customer service processes including IT enabling technology.

Summary of Excluded Efficiency Gains

There are a number of efficiency gains that are not quantified in sections A, B or C. In our view, these are real efficiencies that are likely to be realized as a consequence of the merger. However, they are difficult to quantify on the basis of the information that is available.

These efficiencies are as follows:

- **Part Time Delivery Truck Utilization.** Following the merger, the increased scale of operations is likely to lead to real efficiencies. In some cases, for example, a delivery truck is driven currently only on a part time basis, often by a service technician who splits his time between providing technical service and driving a bulk truck. If the truck can be driven on a full time basis, a dedicated driver will increase his knowledge of the area that he serves, benefit from the specialization he has in that area and improve productivity. This further reduces the overall fleet and driver requirements in a trade area. The range of such excluded efficiencies is \$500,000 to \$2 million over a 10 year period, as set out in Figure 1.
- **Increased Customer Density.** Following the merger Superior is likely to reduce the number of service technicians and trucks required as a consequence of increased customer density effects, along the principles of fleet reductions in Tabs C4 - Delivery Fleet and C5 - Delivery Drivers. The range of such excluded efficiencies is \$9 million to \$13 million over a 10 year period, as set out in Figure 1.
- **Service Specialization.** Following the merger, due to the increased scale of service operations, Superior's technicians are likely to specialize. This does not occur currently because Superior and ICG each lack "critical mass" in some of the markets they serve. By combining their customer networks and the associated demand from their customers, the merged organization will reduce job-sharing that currently exists. Job-sharing is recognized within both Superior and ICG as a contributor to decreased productivity. Examples where the lack of specialization has contributed to lower productivity include the following:
 - Technicians who are "overqualified" are currently performing work such as installations that can be readily performed by less qualified technicians. Because demand for service in a given trade area may not justify having technicians of both higher and lower skill levels, Superior and ICG must each default to hiring more technicians of higher skill levels than will be necessary as a merged organization. For example, tank installations and maintenance require a lower level of expertise than does the service of propane-powered appliances and equipment.
 - Similarly, in some trade areas, a service technician currently splits his time working both as a delivery driver and as a service technician because there is simply not enough delivery and service demand to justify a dedicated employee for each task. Technicians are paid at the technician wage rate even during periods that they are making deliveries.

- When there is reduced demand for technicians during certain periods of the year, technicians currently perform in-yard work not requiring someone of their skill level, such as cutting grass or painting tanks. A merged firm will avoid having to pay technician wages for such work that can be performed by lower paid plant/operations staff or even an outside service.

As specialization opportunities occur and productivity improvements are realized, further reductions of drivers and service technicians and the associated fleet are likely to result, creating Efficiency Gains in excess of those expressed in Tab C4 – Delivery Fleet, C5 – Delivery Drivers, C6 – Service Technicians and C7 – Service Fleet. The range of such excluded efficiencies is \$1.5 million to \$3.0 million over a 10 year period, as set out in Figure 1.

- **Reduced Crane Truck Rentals.** As described in Tab C7 – Service Fleet, currently both ICG and Superior each rent crane trucks when their existing crane truck in the area is otherwise utilized. This occurs because, currently, demand in the area typically does not warrant having two or more crane trucks, or an additional crane truck is required in the trade area due to short-term increases in demand. With sufficient combined scale, these rental costs are likely to be significantly reduced through higher utilization of the remaining fleet, creating an Efficiency Gain. The range of such excluded efficiencies is \$300,000 to \$500,000 over a 10 year period, as set out in Figure 1.
- **Further Network Optimization.** The Efficiency Gain described in Tab C10 – Propane Supply and Primary Transportation is based in part on an analysis of the supply of propane to a sample of 9 branch locations. The results of this sample have not been extrapolated to the remaining branches. Further efficiencies are likely to be achieved. They can reasonably be estimated by analyzing all branches as to the propane supply source and mode of primary transportation used. Further Efficiency Gains are likely to be realized as a result of the increase in optimization opportunities that are possible. The range of such excluded efficiencies is \$1.5 million to \$2.5 million over a 10 year period, as set out in Figure 1.

The excluded Efficiency Gains have been estimated using the following standards:

- Low – The lower limit of the range in which the Efficiency Gain is likely to be realized.
- High – The upper limit of the range in which the Efficiency Gain is likely to be realized.

A summary of the excluded Efficiency Gains is set out below:

Figure 1 – Excluded Efficiency Gains

| Efficiency | 10 Year Post Merger Efficiency Gains (\$millions) | |
|--------------------------------------|--|-------------|
| | Low | High |
| Part Time Delivery Truck Utilization | 0.5 | 2.0 |
| Increased Customer Density | 9.0 | 13.0 |
| Service Specialization | 1.5 | 3.0 |
| Reduced Crane Truck rentals | 0.3 | 0.5 |
| Further Network Optimization | 1.5 | 2.5 |
| Total | 12.8 | 21.0 |

GLOSSARY OF TERMINOLOGY

Cost of Debt

Rate of return required by a company's debt holders and therefore the cost of debt to the company.

Cost of Equity

Rate of return required by a company's equity holders and therefore the cost of equity to the company.

Constant or Real Dollars

Standard monetary units of purchasing power, defined by stating a base year.

Discounting

The process of adjusting future cash flow values by a "*Discount Rate*" to their "*Present Value*" at a stated point in time.

Discounted Cash Flow

A financial model which discounts periodic future cash flows to their "*Present Values*" and calculates the "*Net Present Value*" of those cash flows.

Discount Rate

A "*Rate of Return*" used to convert a monetary sum, payable or receivable in the future, into "*Present Value*".

Net Present Value

The net value of an investment when all the future values of the benefits less costs are discounted to their present values at the appropriate discount rate and summed or "netted".

Nominal Rate of Return

A discount rate that includes both an inflation component and a "*Real Rate of Return*". Rates are typically quoted as nominal rates of return.

Opportunity Cost

The value of benefits foregone in selecting a course of action among alternatives. In relation to value determination, the value of alternative investments not made.

Optimal Capital Structure

The notional capital structure which maximizes a firm's value by utilizing the appropriate amount of relatively lower cost debt financing without excessive risk to the firm.

Appendix 2

GLOSSARY OF TERMINOLOGY, continued...

Present Value

A future cash flow "*Discounted*" to a value which adequately provides for the loss of opportunity (opportunity cost) associated with an investment of similar "*Risk*" throughout the discount period.

Rate of Return

The amount in excess of an investment's starting value which is expected to be returned to the owner of the investment expressed as an annual percentage of the investment's starting value.

Real Rate of Return

A discount rate that excludes consideration of inflation. Can be estimated as the "*Nominal Rate of Return*" minus the expected rate of inflation.

Risk

The degree to which an outcome is uncertain. The extent of possible variation in the outcome.

Risk Free Rate of Return

The prevailing "*Rate of Return*" on money market investments such as long-term government of Canada bonds and high quality long-term corporate bonds, being investments which are generally free from substantial credit risk. Aside from inflation related purchasing power risk, these investments are expected to put the investor at relatively little risk.

Risk Premium

The incremental or excess return required on an investment over and above the "Risk Free Rate" to compensate the investor for the "*Risk*" of that investment.

Sensitivity Analysis

An examination of the effect that a change in a single variable has on the outcome of the analysis which depends on that variable.

Weighted Average Cost of Capital

The average cost of capital provided to a company by both debt holders and equity holders assuming that an optimal capital structure is in place.

SCOPE OF REVIEW

Interviews

In preparing this report we have had discussions with the following persons:

- Representatives of A.T. Kearney concerning their methodology, analysis and findings as contained in their report.
- The management of Superior Propane concerning the business of Superior Propane and its capital structure.
- The management of ICG Propane concerning the business of ICG Propane and its capital structure.
- Zaheer Khan (Managing Director, Corporate Ratings Group) and Eugene Williams (Vice President) of CBRS Inc. concerning the propane distribution industry sector and the financial structure of Superior Propane. Canadian Bond Rating Service is an independent debt-rating agency, specializing in the rating of Canadian borrowers.
- Daryl Rudichuk (Equity Research Analyst) of Scotia Capital Markets concerning rates of return and the financial structure within the propane industry sector.

Documents

In preparing this report we have reviewed and relied upon the following documents:

1. The A.T. Kearney report on Efficiency Gains (see Appendix 1).
2. Corporate credit reports written by Canadian Bond Rating Service in respect of Superior Propane Inc. dated September 29, 1998 and April 22, 1998.
3. Notice of Application dated December 7, 1998 between The Director of Investigation and Research, and Superior Propane Inc., Petro-Canada, The Chancellor Holdings Corporation and ICG Propane Inc.
4. Submissions to the Competition Bureau by Davies, Ward & Beck dated, October 16 and November 16, 1998.
5. Superior Propane Income Fund Secondary Offering Short Form Prospectus dated August 26, 1997.
6. Superior Propane Income Fund annual reports for fiscal years ended December 31, 1996 to 1998.

7. Superior Propane audited consolidated financial statements for the years ended December 31, 1996 to 1998.
8. Superior Propane Income Fund Initial Public Offering Prospectus, dated September 25, 1996.
9. ICG Propane Income Fund Initial Public Offering draft prospectus, dated May 29, 1998 (second amended preliminary version).
10. ICG Propane Inc. unaudited financial statements for the year ended December 31, 1998.
11. Credit Agreement between Superior Propane Inc. and The Toronto-Dominion Bank and Canadian Imperial Bank of Commerce, dated July 16, 1998, in respect of a \$200,000,000 non-revolving acquisition credit facility.
12. Credit Agreement between Superior Propane Inc. and The Toronto-Dominion Bank, dated June 3, 1998, in respect of a \$35,000,000 extendible revolving term credit facility.
13. Draft of The Government of Canada's Benefit-Cost Guide, dated July 1998 (written by the Treasury Board of Canada Secretariat).
14. Various publicly available industry, economic and market data.
15. Security analyst reports written in respect of the Superior Income Fund, as set out below:

| <u>Securities Firm</u> | <u>Analyst</u> | <u>Dates of Reports</u> |
|------------------------|-----------------|---|
| CIBC Wood Gundy | Brian Ector | April 28, 1999 February 23, 1999 February 25, 1999 December 2, 1998 November 18, 1998 November 16, 1998 November 3, 1998 July 22, 1998 |
| CT Securities | Leslie Lefebvre | November 18, 1998 |

| <u>Securities Firm</u> | <u>Analyst</u> | <u>Dates of Reports</u> |
|-------------------------|-----------------|---|
| RBC Dominion Securities | Petro Panarites | March 1, 1999 February 5, 1999 November 3, 1998 October 9, 1998 July 22, 1998 July 17, 1998 July 7, 1998 July 7, 1998 |
| Scotia Capital Markets | Daryl Rudichuk | February 25, 1999 February 19, 1999 January 14, 1999 December 11, 1998 December 9, 1998 December 8, 1998 December 2, 1998 November 25, 1998 November 23, 1998 November 3, 1998 September 1, 1998 June 26, 1998 |
| | Leslie Lefebvre | September 17, 1997 |
| TD Securities | Karen Taylor | April 22, 1999 March 16, 1999 March 5, 1999 November 25, 1998 |

**COMPUTATION OF EFFICIENCY NET
PRESENT VALUE RANGE**

Superior Propane and ICG Propane Computation of Efficiency Net Present Value Range

| Efficiency Gains (\$Millions): | Total | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | <i>High Range</i> | 420.8 | 48.0 | 45.0 | 42.8 | 40.6 | 40.8 | 40.4 | 40.5 | 40.7 | 40.9 |
| <i>Low Range</i> | 380.7 | 43.5 | 40.7 | 38.7 | 36.8 | 36.9 | 36.5 | 36.7 | 36.8 | 37.0 | 37.1 |
| <i>Midpoint</i> | 400.7 | 45.7 | 42.9 | 40.8 | 38.7 | 38.9 | 38.5 | 38.6 | 38.8 | 38.9 | 39.1 |
| <i>Elapsed Time to Receipt of Cash Flow (Years)</i> | | 0.5 | 1.5 | 2.5 | 3.5 | 4.5 | 5.5 | 6.5 | 7.5 | 8.5 | 9.5 |

| Discount Rates: | low | high |
|-----------------------------|------|------|
| Nominal Discount Rate Range | 8.0% | 9.0% |
| Less: Annual Inflation | 2.0% | 2.0% |
| Real Discount Rate Range | 6.0% | 7.0% |

| Present Values: | Total | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|--|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | <i>High Range</i> Present Value of High Range at 7.0% | 308 | 46.4 | 40.7 | 36.1 | 32.1 | 30.1 | 27.8 | 26.1 | 24.5 | 23.0 |
| <i>Low Range</i> Present Value of Low Range at 6.0% | 291 | 42.2 | 37.3 | 33.5 | 30.0 | 28.4 | 26.5 | 25.1 | 23.8 | 22.5 | 21.3 |
| <i>Midpoint of Range</i> | 300 | | | | | | | | | | |

SUPPORT FOR BENCHMARK RATES OF RETURN**Table of Contents**

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SUPPORT FOR DISCOUNT RATES OF RETURN

Summary

A comparison of Efficiency Value to the aggregate of anti-competitive effects of the merger, if any, referencing only constant (nominal) dollar amounts would not take into account the impact of differences in the time of receipt and expenditure of funds and the related time value of money. To account for this, we have computed the Efficiency Net Present Value.

The range of rates appropriate for the discounting of the Efficiency Gains to Efficiency Net Present Value are:

- at the low end of the Efficiency Value range, Superior's long-term debt rate of 8.0%.

This is approximately 2 % higher than 10 year term Government of Canada bonds at 5.7%, 30 year term Government of Canada bonds at 5.77%, and the prime borrowing rate of 6.25%. 8% reflects risk equal to that associated with interest and is applied to the low end of the Efficiency Value range to produce a lower boundary for the Efficiency Net Present Value range; and

- at the high end of the Efficiency Value range, Superior's weighted average cost of capital of 9.0%.

This rate reflects significant equity equivalent risk and is applied to the high end of the Efficiency Value range to produce an upper boundary for the Efficiency Net Present Value range.

As earlier noted:

- Efficiency Net Present Value is the aggregate of the net present value of the Efficiency Gains, determined at a market based discount rate commensurate with the risk associated with achieving the underlying cash flows over a specified term;
- assuming a constant term, the higher the discount rate the lower the Efficiency Net Present Value.

As to the factors influencing the range of market based discount rates, our comments are set out below. The broad range of rates to consider is set out in Appendix 5B immediately following.

Factors Relevant to a Selection of an Appropriate Discount Rate Range

The appropriate rate should take into account the following, among other, considerations:

- the Efficiency Gains are only being computed in light of the assertion that there is a substantial lessening of competition as a result of the merger. Effectively, that is to say, on the assumption there is a higher likelihood that the merged entity will be able to exercise market power over a sustained period to substantially raise prices and enjoy a lower equity risk than Superior faced prior to the merger. To be conservative, we have not reduced the range of appropriate rates to account for this;
- the Efficiency Gains are internally focused and reflect savings in controllable cost areas such as overhead, leadership, rents, truck routing, information technology and the like. The Efficiency Gains primarily result from redundancies and duplications arising out of the merger and not from changing the operating paradigm;
- the short anticipated time period (1-3 years) over which the Efficiency Gains will be implemented and the lengthy period over which they will be enjoyed;
- the Efficiency Gains are not revenue or demand oriented;
- the discount rate should not reflect all the business risks facing Superior prior to the merger;
- a high level of confidence that the aggregate Efficiency Gains can be successfully implemented as planned;
- there is as much or more certainty associated with the aggregate Efficiency Gains than with the payment of interest by either Superior or ICG pre-merger. Hence the rate could be less than a senior corporate debt rate, namely 8.0%;
- market rates of return for comparable opportunities; and
- the market based risk free rate (the rate of return which can be earned on a risk free investment, such as a Government of Canada Treasury Bond) plus a risk premium (the incremental amount required beyond the risk free rate of return to provide for the possibility that the Efficiency Gains will vary from their predicted levels and/or timing).

Keeping the above in mind, we sought to bracket the discount rate within a range of market based risk or opportunity cost indicators associated with comparable cash flows as follows:

- As to a lower boundary, notwithstanding that the Efficiency Gains are the probable amounts, they are not absolutely certain to be realized and hence the risk free rate of return is too low. Some risk premium is required and the overall rate is best considered analogous to Superior Propane's cost of debt; and
- As to an upper boundary, the most dominant traditional business risk facing equity holders is of course the risk that revenues and gross margins will decline and the amalgam of market forces will continuously be threatening them. However, since Efficiency Gains include only expenses and outlays separate from gross margin, these equity type risk factors do not directly impact the Efficiency Gains. The Efficiency Gains are predominantly a function of internal organization and cost factors which are more predictable and certain than revenue based factors.

As the Efficiency Gains are significantly insulated from the business risks facing Superior's equity holders, the risk premium should be less than that appropriate to an equity rate of return. Hence, to be conservative, the upper boundary of the discount rate is most analogous to Superior Propane's weighted average cost of capital. This weighted average rate is by definition higher than the cost of debt and lower than the cost of equity.

Risk Factors Associated with the Efficiency Gains

The risks to consider in the selection of an appropriate discount rate are a subset of the general business risks facing a business. They are particular to the nature of particular potential synergies and what must be done in order to realize the Efficiency Gains.

These risks, in general terms, can be summarized as follows:

- Effectiveness of management execution
- Complexity of the synergy opportunities
- Similarity of the merging businesses
- Degree of business focus
- Sufficiency of financial strength to fund restructuring requirements
- Proximity in terms of time to the realization of Efficiency Gains
- Reaction of outside forces (customers/competitors/suppliers)
- Reliability of efficiency forecasts

The rates of return appropriate to Superior Propane's capital providers encompass all of the business risks facing Superior Propane. These risks do not impact the Efficiency Gains and do not specifically influence the appropriate rate:

- Demand changes
- Supply price changes
- Competition from other propane distributors
- Competition from alternate energy sources
- Customer losses
- Labour force disruptions and inefficiencies
- Operating cost changes
- Tax changes
- Interest rate fluctuations
- Obsolescence of equipment
- Management decision making
- Catastrophe

Impact of the Efficiency Gains being in Dollars of Constant Purchasing Power

The discount rate should not include an inflation factor; rather, it should represent the "real" rate of return because the Efficiency Gains are in dollars of constant purchasing power (1999 dollars) and do not reflect increases due to inflation.

Hence, assuming a 2% inflation factor over the next 10 years, the nominal rates of 8.0% and 9% and imply 6.0% to 7.0% on a real return basis. As the Efficiency Gains analysis is done in real dollars, our findings are independent of the rate of inflation.

SUPPORT FOR BENCHMARK RATES OF RETURN

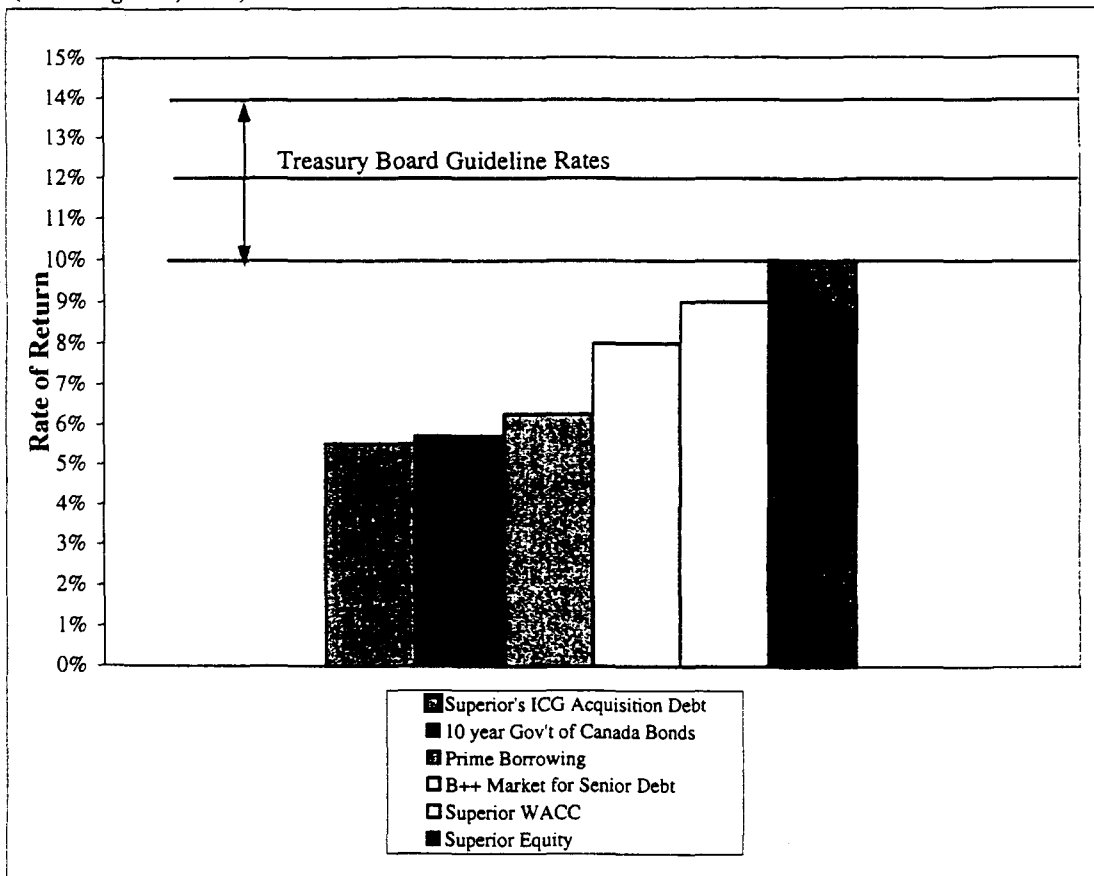
Rate of Return Benchmarks

Rate of return benchmarks are shown in the chart and table that follows. We have selected a range from the long-term debt rate (8.0%) to the weighted average cost of capital (9.0%) as appropriate rates of return for discounting Efficiency Gains. This range reflects the risk associated with the Efficiency Gains (as discussed in Appendix 5A) and the benchmarks shown in the following chart and table.

SUPPORT FOR BENCHMARK RATES OF RETURN

Rate of Return Benchmarks

(as at August 5, 1999)



| | <u>Nominal Rate of Return</u> | <u>Inflation Rate</u> | <u>Real Rate of Return</u> Note 1 |
|---|-------------------------------|-----------------------|--------------------------------------|
| Market Benchmarks: | | | |
| Superior's ICG Acquisition Debt | 5.50% | 2.00% | 3.50% |
| 10 year Gov't of Canada Bonds | 5.70% | 2.00% | 3.70% |
| Prime Borrowing | 6.25% | 2.00% | 4.25% |
| B++ Market for Senior Debt | 8.00% | 2.00% | 6.00% |
| Superior WACC | 9.00% | 2.00% | 7.00% |
| Comparable US Equity | 10.00% | 2.00% | 8.00% |
| Superior Equity | 10.00% | 2.00% | 8.00% |
| Treasury Board Benefit - Cost Analysis Guideline Rates (Note 2): | | | |
| Low (for sensitivity analysis) | 10.00% | 2.00% | 8.00% |
| Specified | 12.00% | 2.00% | 10.00% |
| High (for sensitivity analysis) | 14.00% | 2.00% | 12.00% |

Notes:

1. Represents: Nominal Rate of Return - Inflation Rate.
2. These rates are quoted in real terms, the nominal rate was calculated as: Real Rate of Return - Inflation Rate

SUPPORT FOR BENCHMARK RATES OF RETURN**Rate of Return Benchmarks**

(As at August 5, 1999)

| Description | Yield | Source | Comments |
|--|--------|---|--|
| Superior Revolving Credit Line | 5.25% | Superior/TD, CIBC, ABN-AMRO & CIBC Credit Agreements. Bank of Canada 30 day BA rates (4.75%) | Facility is \$140 million. Rates are short term. |
| Superior Acquisition Credit Facility | 5.50% | Superior/TD Bank Credit Agreement. Bank of Canada 30 day BA rates (4.75%) | Facility is \$200 million. Rates are short term. |
| 10 Year Government of Canada Bonds | 5.70% | Bank of Canada | |
| 30 Year Government of Canada Bond | 5.77% | Bank of Canada | |
| Prime Borrowing Rate | 6.25% | Bank of Canada | |
| Market Yield on Senior Debt rated similar to Superior (B++) | 8.00% | Review of yields on corporate debt listed in Financial Post | |
| Superior WACC | 9.00% | Based on debt and equity returns. | Based on 35% debt to entity level. |
| Equity yields on comparable US propane distribution limited partnerships | 9.70% | Scotia Capital Markets report Nov 23/98 | Debt levels in US are higher. US limited partnership structures have similar tax advantages. US Equity yields said by analysts as likely to increase as initial guaranteed returns expire (all as per analysts reports). |
| Superior Income Trust Fund Yield | 10.00% | Comparative analysis and analysts reports. | Dividend yield is generally 10% in instances where dividend growth is not foreseeable. |
| Comparable analysis (median annual dividend yield) | 10.10% | Company data | Based on dividend yield for the last fiscal year end for the following comparable companies: Amerigas Partners - LP; Ferrellgas Partners - LP; Suburban Propane Partners - LP; Heritage Propane Partners - LP; National Propane Partners - LP; and Star Gas Partners - LP. |

SUPPORT FOR BENCHMARK RATES OF RETURN

Applicability of Treasury Board Discount Rate

Included in our summary of nominal market rates of return benchmarks are the Treasury Board of Canada's guideline rates as set out in its Benefit-Cost Analysis Guide (July 1998 draft version). We have included these rates in our summary for illustrative purposes as they are referred to in section 5.7.1 of the Merger Enforcement Guidelines of the Director of Investigation and Research.

The Treasury Board rate is 10% in real terms or approximately 12% in nominal terms.

The Treasury Board rates are, according to its Benefit-Cost Guide, intended to reflect an opportunity cost in the private sector for the use of funds spent by the Government of Canada on its programs.

The Merger Enforcement Guidelines also recommend in section 5.7.1 that a sensitivity analysis regarding the assumption of a discount rate includes rates such as a "cost of capital" or "industry hurdle rate" specific to the industry in question. We have included Superior's weighted average cost of capital in our analysis; it is 9%.

While we have considered the Merger Enforcement Guideline's recommendation of the Treasury Board rate, we do not consider it appropriate to this matter. Our reasons include the following:

- Our calculations are based on an extensive scope of work as outlined in this report. The Treasury Board rate is not;
- Our calculations are grounded on facts specific to this matter. The Treasury Board rate is a generic guideline;
- Our calculations are based on market conditions as at August 1999. The Treasury Board rate was last amended in July 1998 and remains in draft form.

SUPPORT FOR BENCHMARK RATES OF RETURN**Representative Bond Ratings and Rates**

(at August 5, 1999)

| Company | Rating | Maturity Date | Yield |
|---|---------------|----------------------|----------------------|
| Air Canada | BB | Feb'04 | 7.21% |
| Avco | A (high) | Jun'03 | 6.19% |
| Canadian Occidental Petroleum Ltd. | B++ | Jun'08 | 7.66% |
| Cards Trust | A++ TM | Jun'03 | 6.10% |
| Canadian Pacific Limited | A (low) | Mar'09 | 6.51% |
| Cleartnet | B | May'08 | 11.93% |
| Coke | A (low) | Mar'04 | 6.19% |
| Crestar Energy | B++(high) | Oct'07 | 7.82% |
| Domtar | BBB (low) | Apr'11 | 8.16% |
| Ford Credit Canada | A+ (high) | Dec'03 | 6.26% |
| Greater Toronto Airport Auth | A (high) | Dec'07 | 6.36% |
| GTC Transcontinental | A (low) | Jun'07 | 6.62% |
| IPL Energy | A | Feb'24 | 6.84% |
| Legacy Hotels Reit | B++ (high) | Nov'02 | 6.98% |
| London Insurance Group Inc. | A+ (low) | Jun'02 | 6.01% |
| Loblaw Companies Ltd. | A (high) | Nov'27 | 6.94% |
| Milit-Air Inc. | AAA | Jun'19 | 6.12% |
| Morgard Real Estate Inv. Trust | A (low) | Oct'07 | 7.60% |
| NAV Canada | AA (high) | Mar'27 | 6.65% |
| Oxford Properties | BBB | Jul'04 | 8.17% |
| Renaissance | A (low) | Feb'07 | 7.06% |
| Rogers | B (high) | Jul'07 | 8.84% |
| Saskatchewan Wheat Pool | BBB (high) | Jul'07 | 7.97% |
| Trizec Hahn Corporation | BBB | Jun'07 | 8.32% |
| Union Gas | A | Nov'25 | 6.92% |
| Westcoast Energy | A (low) | Dec'27 | 6.95% |
| Weston | A | Feb'04 | 6.18% |
| Average of B++ (incl high and low) ratings | | | 7.87% |
| | | | Rounded 8.00% |

Source: Yield information from Financial Post, August 5, 1999
Credit ratings from DBRS and CBRS

SENSITIVITY ANALYSIS REGARDING EFFICIENCY NET PRESENT VALUE

The sensitivity of our Efficiency Net Present Value conclusion to the use of different discount rates is shown below.

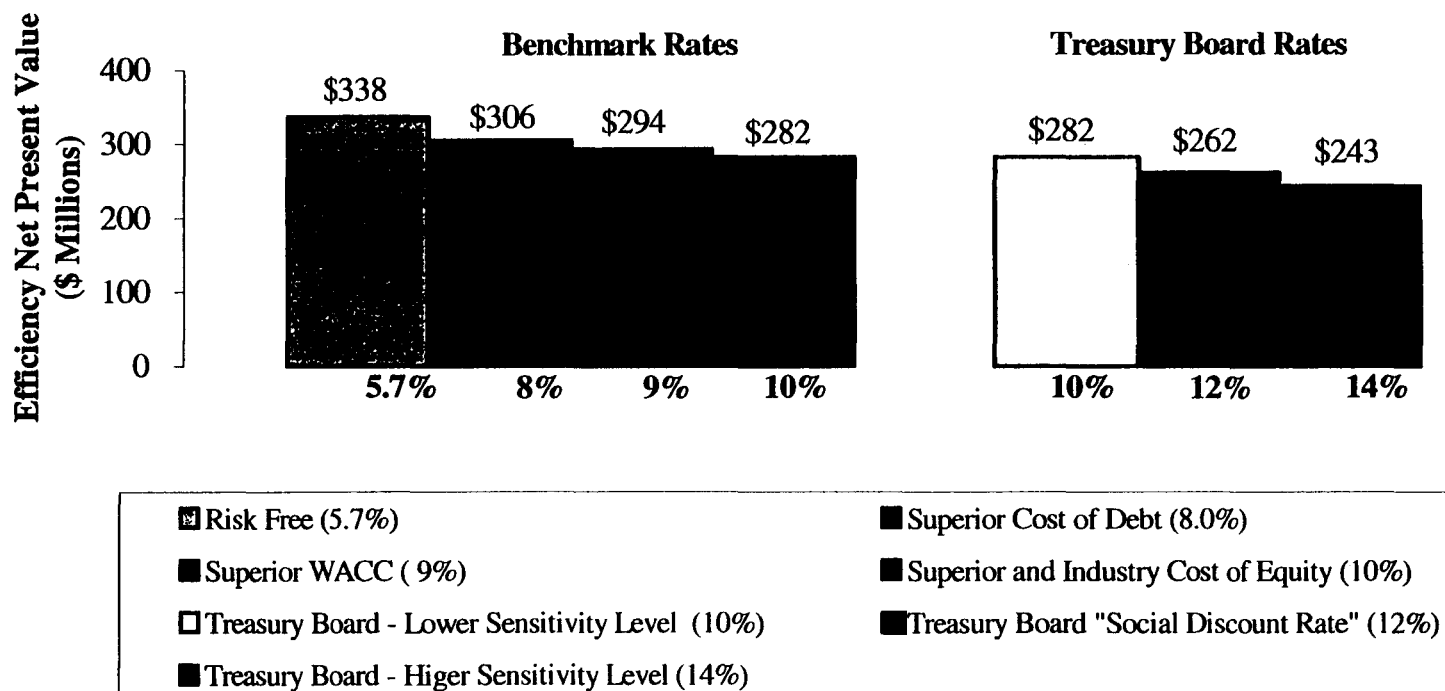
The sensitivity analysis includes the following nominal discount rates:

1. Risk free rate (10 year GOC rate)
2. Superior Propane's long-term cost of debt (cost of B++ debt)
3. Superior Propane's weighted average cost of capital
4. Superior Propane's and the propane distribution industry's cost of equity
5. Treasury Board of Canada's social discount rate (based on July 1998 Draft Cost-Benefit Guide, plus and minus 2%)

An annual inflation rate of 2% has been deducted from these nominal discount rates to convert them to real discount rates and the various Efficiency Net Present Values have been calculated over a 10 year period using an Efficiency Value of \$401 million.

The results of this analysis are shown in the chart below:

Sensitivity of Efficiency Net Present Value to Discount Rate (Nominal Rates Shown)



Superior and ICG**Appendix 7****Cole Valuation Partners Limited Curriculum Vitae and Materials**

The following are the curriculum vitae of Stephen Cole and Colin O'Leary of Cole Valuation Partners Limited followed by extracts from firm materials outlining our valuation, mergers and acquisitions, and corporate finance advisory experience.

Stephen R. Cole, F.C.A., C.B.V., A.S.A.

Partner of Cole & Partners.

Fellow of the Institute of Chartered Accountants of Ontario, Full Member of the Arbitrators' Institute of Canada Inc., Chartered Business Valuator, and Senior Member of the American Society of Appraisers.

Advisor in numerous M&A and corporate finance transactions regarding privately and publicly held businesses and real estate.

Director of various professional and charitable organizations including Canadian Institute of Chartered Business Valuators and Past Chairman, Baycrest Centre for Geriatric Care.

Expert witness and business valuator in litigation matters.

Member of various professional committees including National Specialization Council of the Canadian Institute of Chartered Accountants.

C.A. Magazine business valuations editor. Author of numerous articles for professional journals concerning the valuation of business interests including minority interests. Co-author of book and loose leaf service "Property Valuation and Income Tax Implications of Marital Dissolution". Speaker and lecturer for numerous organizations including University of Toronto, York University, Canadian Bar Association, Law Society of Upper Canada, Ontario Bar Admission School, Insight Educational Services, Canadian Institute, Canadian Tax Foundation, Judicial Institute and others; Federated Press Mergers and Acquisitions Deal-Making Skills Conference 1998 and 1999 (Valuations Chairman), Mergers and Acquisitions Finance Conference 1998 and 1999.

Colin T. O'Leary, C.A., C.B.V., C.F.A.

Chartered Accountant, Chartered Business Valuator and Chartered Financial Analyst.

Business valuation, litigation support and financial advisory services experience with Ernst & Young from 1987 to 1998. Member of Cole Valuation Partners Limited since 1998.

Areas of experience include:

- Business and security valuations involving acquisitions, divestitures, reorganizations, breaches of contract, shareholder buyouts or disputes, family law matters and option agreements.
- Advisory services, due diligence and dispute resolution relating to mergers and acquisitions.
- Asset valuations and analysis involving trademarks, software, contract rights, debt or receivables, off balance sheet items, stock options, and real property.
- Product costing analyses related to predatory pricing and copyright infringement litigation.
- Quantification of financial damages pursuant to breaches of contract and insurance matters, attendance at mediation proceedings, and participation as insurance appraisal arbitrator.
- Fraud investigations and fidelity bond claims involving fraudulent misrepresentation and misappropriation of funds.
- Corporate investigations involving breach of fiduciary duty and wrongful dismissal.
- Regulatory compliance reviews.
- Professional negligence.
- Audit, income tax, and accounting services.

Sales, Mergers and Acquisitions (Business Brokerage)

Cole & Partners assists in formulating sale and exit strategies. We start by exploring and planning the selling strategy, valuing the business, preparing the selling documents, then marketing the company. We target prospective purchasers and lead the negotiation or auction process in a confidential and focused fashion – “a rifle shot approach”. We coordinate many of the parties to the transaction, including partners, key employees and bankers.

We offer similar services to clients seeking a merger or strategic partners. We pay particular attention to the strategic plan, the personalities of the key individuals and the culture of the businesses.

When dealing with competitors, our approach does not risk confidentiality or competitive advantage.

Representative Assignments

- Specialized machine/equipment manufacturer, *\$115-million sales*, sold 100%, *\$85-million*
- Specialized machine/equipment manufacturer, *\$20-million sales*, sold 85%, *\$20-million*
- Loan and investment portfolio owned by Provincial Government, sold 100%, *\$80million*
- Manufacturer of trace analytical equipment, sold 100%, *\$12,000,000*
- Hazardous waste processor, *\$7-million sales*, sold 100%, *\$7,000,000*
- Industrial parts supplier, *\$10-million sales*, sold 100%, *\$6,000,000*
- Printing and graphic arts, *\$13-million sales*, sold 100%, *\$4,000,000*
- Printing and packaging, *\$3-million sales*, sold 100%, *\$1,500,000*
- Administration systems provider, *\$3-million sales*, sold 33%, *\$1,000,000*
- Personnel agency, *\$50-million sales*, sold 40%, *\$1,000,000*
- Medical diagnostic laboratory, sold 100% and refinanced, *\$20,000,000*
- Due diligence reviews pursuant to the sale of businesses, debt and equity issues:
 - purchase of 100%, food processor > *\$50-million sales*
 - sale of 100%, forest products > *\$200-million sales*
 - all of the private placement and brokerage transactions noted on this and the next page

Financing – Equity and Debt Private Placements and Strategic Alliances

Cole & Partners arranges the private placement of debt, equity and the development of strategic alliances and partnerships.

We assist in negotiating price, deal structure, and terms to fit unique requirements and preferences. We identify investors, lenders and partners who “bring more than money” – strategic skills, related industry experience and contacts, particular market perspectives and Board of Director or management skills and experience.

We are well known amongst both the traditional and the niche financing sources including: venture capital funds, merchant banks, investment funds, pension funds, term lenders, banks, families and individuals.

We will recommend only appropriate strategic partners or financing sources.

Representative Assignments

Equity Partners

- Medical diagnosis imaging equipment, \$2-million sales, 40% partner, \$2,000,000
- Radiator manufacturer, \$6-million sales, 50% partner, \$2,000,000
- Rubber processor, \$12-million sales, 50% partner, \$3,500,000
- Brokerage firm, \$20-million commissions, 50% partner, \$10,000,000
- Dairy processor and cheese importer, \$40-million sales, 50% partner, \$12,000,000
- Direct mail processor, \$10-million sales, 75% partner, \$3,500,000
- American parking lot owner and operator, US\$12,000,000
- \$5 US million for land development

Management and Employee Buyouts

- Retail chain, \$40-million sales, \$5,000,000
- Scaffolding rental/sales, \$40-million sales, \$5,000,000
- Food broker, \$8-million commissions, \$3,500,000

Expansion Financing – term debt

- National fruit juice bottler and marketer \$40-million sales, \$5,000,000
- Retail optical chain, \$30-million sales, \$5,000,000
- Lumber yard and retail chain, \$27,000,000
- Naturopathic medicines and supplements, \$12-million sales, \$1,500,000
- Magazine publisher, \$3-million sales, \$1,500,000

Financial Negotiations

Cole & Partners assists in financial negotiations often requiring valuation, corporate finance and personal perspectives. In negotiations with partners, shareholders, investors, bankers, key employees, and family members, we bring objectivity and a solutions focus.

Cole and Partners raises funds on behalf of technology, real estate and venture capital pools.

We bring a combination of financial, practical and engineering skills both with our own staff and through various alliances with other more specialized firms.

We prepare and present business plans, financial reports and projections for use in various corporate situations.

Representative Assignments

- Retail chain, \$60-million sales, Financing negotiations
- Real estate asset manager, \$6-million fees, IPO/Merger negotiations
- Lumber, home improvement centres, \$100-million sales, Sale/Insolvency
- National real estate agency, \$75-million fees, Restructuring/Reorganization
- Trucking sales and service, \$60-million sales, Restructuring/Reorganization
- Direct mail & publishing, \$40-million sales, Restructuring/Reorganization
- Television and Film production and Distribution, \$30-million sales, Restructuring/Reorganization
- Fast food chain, \$20-million sales, Restructuring/Reorganization
- Blood serums and by-products processing, \$10-million sales, Restructuring/Reorganization

Representative Technology/Software Assignments

- Negotiations for merger or acquisition of complementary companies/piggy back arrangements/strategic alliances/consolidated acquisitions:
 - portfolio and mutual fund administrative systems
 - derivatives/risk management software systems
 - transportation management system
 - school administration and municipal accounting
 - management systems
 - Internet service providers
- IPO or sale negotiations:
 - front end banking and trust company systems, \$40 million
 - property management and real estate assets management systems, \$16 million
 - systems integrators, \$18 million
 - system training and consulting, \$18 million
 - Internet service providers, \$12 million
 - integrated circuit board designers, \$4 million
- Investor due diligence:
 - e-commerce system consultants, web page designers and related system integrators
 - telephony software and service providers
 - interactive training software
 - Internet training software
 - telephony and video applications
 - medical support systems
 - teleradiology
 - engineering support systems
 - administrative assistance systems
 - data management applications
 - e-commerce applications
 - environmental testing

Sample Litigation and Valuation Engagements

Cole & Partners' experience outside ordinary valuation and litigation engagements, including intellectual property related matters can be seen in the following:

- Patents and trademarks – quantification of damages (royalty rates and loss of profits) and accounting of profits.
- Analyses of liquidation and other values, return and related definitions pursuant to competition law.
- Product costing analyses in connection with predatory pricing claims.
- Ontario Securities Commission – assist Commission with review of valuations submitted pursuant to Policy 9.1 and related valuation policy consideration.
- Ministry of Revenue – assist Ministry to establish principles, policies and practices, standard criteria and format for private sector business valuations.
- Government owned bank – determine value under various strategic alternatives and assist in strategic planning process.
- Canadian partnership of pension funds – assist funds with approximately 40 investments in private, mid-market companies to establish valuation principles, practices and procedures for periodic reviews.
- Valuation of large, public holding company with many public and private technology based investments.
- Pre-IPO pricing of options and private vs. public values. Post IPO value of escrowed stock for transaction and financing purposes. Public stock pricing analysis for GAAP and compensation purposes.
- Director, committee member and advisor, for pension funds, various public and private investment funds, public and private companies, family businesses and charitable organizations.
- Technology and software based businesses and assets – numerous valuations and broad range of financing, open market M&A assistance and litigation support services.
- Multi-year study of plastic transaction card and electronic funds transfer industry and dominant members in the context of litigation; loss quantification pursuant to other credit card litigation.
- Valuation of several large equity investment and loan portfolios for Ontario Development Corporation and others.
- Technology venture capital/closed end funds – valuation of fund including numerous technology investments ranging from seed capital to later stages.
- Real estate – reorganizations and raising debt and equity financing, investment analysis, litigation support, valuation and expert witness.
- Medical facilities and practices – valuation and analyses for government and professional policy making; and valuations, financing, open market M&A assistance and litigation support services.
- Tax losses valued for various public companies for sale purposes.