

*Original*

CT-89/1

THE COMPETITION TRIBUNAL

IN THE MATTER OF an application by the Director of Investigation and Research under Sections 92 and 105 of the Competition Act, R.S.C. c.C-34, as amended:

AND IN THE MATTER OF the proposed acquisition by Asea Brown Boveri Inc. of certain assets and property comprising the electrical transmission and distribution business of Westinghouse Canada Inc., including those of its wholly-owned subsidiary Transelectrix Technology Inc.

COMPETITION TRIBUNAL TRIBUNAL DE LA CONCURRENCE	
DEC 1 1989	<i>nl</i>
REGISTRAR - REGISTRAIRE	
OTTAWA, ONT.	# 11961

B E T W E E N:

THE DIRECTOR OF INVESTIGATION AND RESEARCH

Applicant

- and -

ASEA BROWN BOVERI INC., WESTINGHOUSE CANADA INC.,  
TRANSELECTRIX TECHNOLOGY INC.

Respondents

PUBLIC AFFIDAVIT OF DONALD MCFETRIDGE

I, Donald McFetridge, of the City of Ottawa in the Judicial District of Ottawa-Carleton, professor, MAKE OATH AND SAY THAT:

1. I am a professor of economics at Carleton University. Attached hereto as Exhibit "1" to my affidavit is a copy of my curriculum vitae. I have acted as an advisor on competition issues in ten cases in the recent past of which in five instances, I have advised the Director of Investigation and Research. I do verily believe that I am qualified to provide the attached report.

2. Attached hereto as Exhibit "2" to my affidavit is a public version of my report filed in support of a motion to vary the terms of the Consent Order dated June 15, 1989.

SWORN before me at the City )  
of Ottawa in the Judicial )  
District of Ottawa-Carleton )  
this day of November, 1989)

*Michael S. [Signature]*  
& Commissioner, etc.

*[Signature]*  
DONALD MCFETRIDGE

CURRICULUM VITAE

NAME: Donald Grant McFetridge

Address: Home: 628 Keenan Avenue  
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Carleton University  
Ottawa, Ontario K1S 5B6  
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Birthdate: August 2, 1945

Birthplace: Regina, Saskatchewan

Marital Status: Married, three children

Current Position: Professor  
Department of Economics  
Carleton University  
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Education:

B. Comm.	University of Saskatchewan	1967
M.A.	University of Toronto	1968
M.Sc.	London School of Economics and Political Science	1969
Ph.D.	University of Toronto	1972

Teaching Experience:

Introductory Economics: U.W.O., 1971-72, 1972-73.

Intermediate Microeconomics: U.W.O., 1972-73, 1973-74;  
Carleton University, 1974-75, 1975-76, 1976-77, 1979-  
80, 1981-82, 1986-87.

Advanced (Undergraduate) Microeconomics: Carleton  
University, 1983, 1984.

Advanced (Graduate) Microeconomics: Carleton University,  
1987-1989.

Industrial Organization: U.W.O. (Honours and Graduate)  
1971-72, 1972-73, 1973-74; Carleton University  
(Graduate) 1974-75, 1975-76, 1978, 1980, 1983, 1984,  
1985, 1988-89 (Honours) 1986-89; McGill University  
(Graduate) 1977.

Applied Microeconomics (Graduate): Carleton University,  
1979-81.

Introduction to Econometrics: U.W.O. (Honours) 1973-74;  
Carleton University (Graduate) 1974-75.

Seminar in Canadian Economic Policy: U.W.O. 1971-72,  
1972-73.

Honours Seminar in the Modern Classics: Carleton University  
1976-77, 1977-78.

Capital Markets: Theory and Institutions: Carleton  
University 1980, 1981, 1982, 1985.

### Publications:

#### Articles in Scholarly and Professional Journals:

"Market Structure and Price-Cost Margins: An Analysis of  
the Canadian Manufacturing Sector", Canadian Journal of  
Economics, 6, (August, 1973).

"The Determinants of Pricing Behaviour: A Study of the  
Canadian Cotton Textile Industry", Journal of Industrial  
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with M.H. Rafiquzzaman, "The Scope and Duration of the Patent Right and the Nature of Research Rivalry", Research in Law and Economics, 8 (1986), pp. 91-120.

"Government Intervention in Technology Transfer: More or Less?", Canada-United States Law Journal, 11 (1986), pp. 331-44.

Articles in Books:

"Short-run Price Adjustment in the Canadian Manufacturing Sector", in Essays on Price Changes (Prices and Incomes Commission, Ottawa, 1973), pp. 93-156.

"Studies in Canadian Industrial Organization: A Review", in P.K. Gorecki and W.T. Stanbury, eds., Perspectives on the Royal Commission on Corporate Concentration (Butterworth, Toronto, 1979), pp. 163-180.

"Research and Development Expenditures", in G. Bruce Doern, ed., How Ottawa Spends Your Tax Dollars (Lorimer, Toronto, 1981), pp. 255-279.

"The Effects of the April 1983 Budget Proposals on Industrial R&D: Some Comments", Proceedings of the Canadian Tax Foundation (Toronto, 1984), pp.

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"The Timing, Mode and Terms of Technology Transfer: Some Recent Findings", in A.E. Safarian and G.Y. Bertin, eds., Multinationals, Governments and International Technology Transfer (London, Croom Helm, 1986), pp. 135-52.

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"Predatory and Discriminatory Pricing" in Frank Mathewson, Michael Trebilcock and Michael Walker eds. The Law and Economics of Competition Policy (Vancouver, The Fraser Institute, forthcoming, 1990).

Books and Monographs:

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with L.J. Weatherley, Some Notes on the Economics of Large Firm Size (Study No. 20, Royal Commission on Corporate Concentration, 1977).

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(editor), Canadian Industry in Transition (Royal Commission on the Economic Union and Development Prospects for Canada, Ottawa, 1986).

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with D.A. Smith, The Economics of Vertical Disintegration (The Fraser Institute, Vancouver, 1989).

Other Publications:

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"Gli Effetti del monopolis sui prezzi", Mercurio, 17, (September, 1976).

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Review of J. Dunlop, D. McQueen and M. Trebilcock, Canadian Competition Policy in Canadian Competition Policy Record (December, 1987).

Papers Presented:

"Predatory and Discriminatory Pricing" (Conference on Economic Competition and the Law, Toronto, June 23-25, 1988).

"The Effects of Concentrated Ownership and Cross-Ownership on the Stability and Efficiency of the Financial System" (Conference on Mergers, Corporate Concentration and Corporate Review in Canada, Montreal, March 23-24, 1987).

"The Mode and Timing of Technology Transfer: A Simultaneous Models", McMaster University, Hamilton, December, 1985.



"The Timing, Mode and Terms of Technology Transfer: Some Recent Findings", Round Table on International Technical Transfers in Advanced Countries: Multinational Firms and National Policies, University of Paris, Dauphine, September 5-7, 1985.

with H.E. English, "Long-term Industrial Policies in a Small Open Economy", The Fifteenth Pacific Trade and Development Conference, Tokyo, August 27-29, 1985.

"The Efficiency Consequences of Privatization", at "Weaving a New Industrial Policy: Concentration, Deregulation and Privatization" (a conference sponsored by the Institute for Research on Public Policy, Toronto, February 22, 1985).

with Stanley Wong, "Predatory Pricing in Canada: The Law and the Economics", Law and Economics Workshop, University of Toronto, April 11, 1984.

with C.E. Hughes, "The Theory of Incremental Investment Incentives and Its Application in the Case of Industrial R&D", McMaster University, April 10, 1985.

with C.E. Hughes, "Conventional and Incremental Investment Incentives in Models of Optimal Capital Accumulation", Annual Meetings of the Canadian Economics Association, Vancouver, June 1-3, 1983.

with Mohammed Rafiquzzaman, "The Patent Term, the Scope of the Patent Right and the Definition of Competition", Conference on the Economics of Intellectual Property, University of Western Ontario, London, March 31-April 2, 1983.

with Mohammed Rafiquzzaman, "The Patent Term, the Scope of the patent Right and the Definition of Competition", Concordia University, Montreal, December, 1982.

with Mohammed Rafiquzzaman, "The Patent Term, the Scope of the patent Right and the Definition of Competition", Trent University, Peterborough, November, 1982.

with W.H. Davidson, "Technology Transfers and the Theory of the Firm", Annual Meetings of the Academy of International Business, Montreal, October 15-17, 1981.

with W.H. Davidson, "National Policies and Characteristics and the Mode of International Technology Transfer", Annual Meetings of the Canadian Economics Association, Halifax, May 25-27, 1981.

with W.H. Davidson, "Technology Transfers and the Theory of the Firm", Laval University, Department of Economics, November, 1980.

"The Efficiency Implications of Earnings Retentions", McGill University, Department of Economics, November, 1976. with J.D. May, "The Effects of Capital Cost Allowance Measures on Capital Accumulation in the Canadian Manufacturing Sector", Annual Meetings of the Canadian Economics Association, Quebec City, May, 1975.

Previous Positions Held:

Academic:

Lecturer, Department of Economics, University of Western Ontario, 1971-72.

Assistant Professor, Department of Economics, University of Western Ontario, 1972-74.

Assistant Professor, Department of Economics, Carleton University, 1974-75.

Associate Professor, Department of Economics, Carleton University, 1975-1982.

Visiting Associate Professor, Centre for Study of Regulated Industries, McGill University, 1977-78.

Professor, Department of Economics, Carleton University, 1982-

Other Academic:

Member, Academic Advisory Board, Centre for the Study of Regulated Industries, McGill University, 1977-80.

Supervisor of Honours Studies, Department of Economics, Carleton University, 1977-78.

Honorary Research Fellow, Department of Economics, Harvard University, 1978-79.

Canadian Editor, Journal of Industrial Economics, 1979-84.

Associate Editor, Journal of Industrial Economics, 1984-1987.

Supervisor of Ph.D. Studies, Department of Economics,  
Carleton University, 1979-82.

Member, Advisory Committee to the Minister of Regional  
Industrial Expansion, 1982-83.

Director, Joint Doctoral Programme in Economics, Carleton  
University/University of Ottawa, 1982-85.

Lecturer, Qing Hua University, Beijing Chin, November, 1985.

Lecturer, National Defence College, 1988-89.

Other Professional:

Economist, Prices and Incomes Commission, 1969-71.

Consulting Economist, Department of Consumer and Corporate  
Affairs, 1972, 1978-79, 1986-89.

Consulting Economist, Treasury Board, 1972-73.

Consulting Economist, Department of Industry, Trade and  
Commerce, 1973-76, 1980-

Consulting Economist and member of Research Management  
Committee, Ontario Economic Council, 1974-76.

Consulting Economist, Ministry of State for Science and  
Technology, 1975, 1985.

Consulting Economist, Royal Commission on Corporate  
Concentration, 1975-76.

Consulting Economist, Anti-Inflation Board, 1976-77.

Consulting Economist, Department of Regional Economic  
Expansion, 1977.

Consulting Economist, Economic Council of Canada, 1979-1981,  
1986-87.

Consulting Economist, Canadian Tax Foundation, 1980-82.

Research Co-ordinator, Royal Commission on the Economic  
Union, 1983-85.

Consultant, World Bank, 1985.

Consultant, Department of Energy, Mines and Resources, 1987-  
88.

Consultant, Canadian International Trade Tribunal, 1989.

References:

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## Biographical Information

Donald G. McFetridge is currently a Professor in the Department of Economics at Carleton University in Ottawa, Canada. He was educated at the University of Saskatchewan, the London School of Economics and the University of Toronto. He has also taught at the University of Western Ontario, McGill University and Qinq Hua University in Beijing was a Visiting Research Fellow at Harvard University.

Professor McFetridge has published numerous articles and books on various aspects of industrial economics and economic policy. He has served as a consultant to a number of public organizations, government departments and Royal Commissions.

*Public*

This is Exhibit "2" referred to in the  
Affidavit of Donald G. McFetridge  
dated this 7 day of December  
19 89  
*Donald G. McFetridge*  
A Commissioner etc., in and for the  
Province of Ontario.

An Assessment of Recent Changes in  
Import Competition in the Market for  
Power Transformers and of the Effect of  
Proposed Amendments to the Consent  
Order on Competition

Public Report of  
D. G. McFetridge, Ph.D.

## Introduction

1. I have been requested by Asea Brown Boveri to examine the extent and nature of the international competition currently faced by Canadian suppliers of power transformers and to provide an opinion regarding the changes in the Canadian market for transformers covered by the Consent Order.
  
2. For purposes of this report power transformer means a transformer with a base rating in excess of 50 MVA (megavolt amperes) or 735 kv. (kilovolts) voltage classification. This is a slightly broader definition than the one appearing in the Consent Order. This does not materially affect my conclusions.
  
3. The Consent Order provides for:
  - (a) A remission of customs duties for a period of five years beginning January 1, 1990 on:
    - o all imports of autotransformers greater than 300 MVA.
    - o all imports of other transformers greater than 275 MVA.
    - o all imports of transformers of class 765 kv. or greater.

(b) An acceleration of tariff reductions on imports from the United States of:

- o autotransformers greater than 100 MVA up to and including 300 MVA.
- o other transformers greater than 50 MVA up to and including 275 MVA.
- o all transformers of class 765 kv. or higher.

The tariff rate is to be reduced to six percent effective January 1, 1990, to three percent effective January 1, 1991 and to zero effective January 1, 1992.

4. The Consent Order stipulates that if the tariff changes described above do not receive approval by January 1, 1990, ABB is to divest itself of specified operations of TTI. The business of TTI is to be held separate from that of ABB until either the tariff changes are approved or the requisite divestiture occurs.
5. My understanding is that the purpose of the hold separate in the Consent Order is to facilitate divestiture in the event that it is required and to maintain TTI as an alternative domestic supplier to ABB in the 275 MVA and up range and to ABB and Federal Pioneer in the 50 to 275 MVA range until the tariff changes described above are approved or a divestiture occurs. One purpose of my report is to address the question of whether the hold separate is presently playing the central



role of ensuring competition that was envisaged for it when the Consent Order was negotiated.

6. My examination of the evidence which is reported in detail below reveals that international suppliers of transformers are already playing a more prominent role in the Canadian market than they did when the Consent Order was being negotiated. This increase in international competition appears to stem from:

- (a) a distinct change in the purchasing policies of Hydro Quebec and Ontario Hydro;
- (b) the undertaking filed with the Tribunal by ABB to refrain from direct or indirect anti-dumping actions for a period of five years; and
- (c) the anticipation that the duty remission and accelerated tariff reduction provided for in the Consent Order will receive regulatory approval.

There could be other reasons for the increased activity of foreign transformer suppliers in Canada. These might include: the appreciation of the Canadian dollar; an apparent increase in Canadian demand relative to capacity and

a perception that Canadian transformer users might be searching for alternative sources of supply.

7. In the preparation of my report I have relied on the following sources of information:

- (a) A personal interview with Mr. Jean-Yves Bureau, Manager and Contracts Groupe Equipment, Hydro-Québec together with some tables prepared by Mr. Bureau's staff;
- (b) A telephone interview with Mr. Ron Field, Assistant to the Vice President, Ontario Hydro, together with data on Ontario Hydro transformer purchases provided over the telephone by Mr. Farnham of Ontario Hydro;
- (c) B.C. Hydro bidder read-outs provided by ABB;
- (d) Electrical and Electronic Manufacturers Association of Canada orders data provided by ABB;
- (e) ABB commercial intelligence; and
- (f) Dr. Mathewson's affidavit filed with the Tribunal.

Hydro Quebec

8. Hydro Quebec has confirmed that it has changed its transformer purchasing policy. Quotations are presently being sought from several foreign suppliers. This was not the practice prior to 1989.
  
9. Hydro Quebec plans to solicit bids from foreign suppliers in 1989 and 1990. It will then choose two foreign suppliers who will be asked to quote, along with ABB, on orders for transformers rated at 200 MVA and higher.
  
10. An official of Hydro Quebec listed four candidates for the two foreign supplier positions. These are:
  - o Jeumont Schnieder (France).
  - o Alsthom (France).
  - o Siemens (Germany).
  - o Fuji (Japan).
  
11. Jeumont Schnieder is virtually certain to be one of the foreign suppliers from whom Hydro Quebec solicits bids on a continuing basis. Hydro Quebec has already placed one order with Jeumont Schnieder for three 370 MVA transformers to be installed at Lévis. The order is valued at \$7 million and was placed in July 1989. According to an official of Hydro Quebec Jeumont Schnieder was awarded the contract "on price"

and because its technology is derived from Westinghouse designs with which Hydro Quebec engineers are familiar. The official also stated that Jeumont Schnieder had been asked to bid on an order for three 233 MVA transformers to be installed at Arnaud (Projet Alouette).

12. According to Hydro Quebec both Siemens and Alstom have also shown interest in being long-term suppliers. ABB's commercial intelligence is that these two firms are both bidders on a contract to provide eighteen 110 MVA and three 55 MVA reactors for four different Hydro Quebec stations and that the order will be split with some going to foreign suppliers. ABB estimates the value of this order at \$21 (Hydro Quebec confirmed that the order would split but said only that it was "possible" that foreign suppliers would get a portion).
13. Hydro Quebec has also had discussions with Fuji. Fuji is interested in supplying transformers but cautious given its past experience with anti-dumping actions.
14. Two divisions of Hydro Quebec are involved in the purchase of transformers. One group deals with new substations and additions to existing substations. The other group deals with spares and replacements. The first group provided data on their orders for transformers rated at 735 kv. and either

370 MVA or 550 MVA. These orders total \$16.3 million in 1989 to date. Foreign orders (the order to Jeumont Schnieder) account for 38 percent of this total.<sup>1</sup> My understanding is that this represents all the orders made by this group for transformer rated at 735 kv. and over 200 MVA. This does not represent all of the transformer purchases of Hydro Quebec. As far as ABB is aware no other orders have been placed abroad to date. The actual proportion of total Hydro Quebec transformer orders going to foreigners this year is, therefore, less than 38 percent.

15. More generally, the manager of the purchasing group supplying these data stated that his is satisfied foreign suppliers can be competitive and that he looks forward to going "outside" "much more often than before" as Hydro Quebec becomes more familiar with foreign suppliers.
  
16. The likelihood is that, as a consequence of this policy change ABB will supply a smaller fraction of Hydro Quebec requirements in the future than it has in the past. Specifically, Hydro Quebec reports that its purchases (which I take to be deliveries rather than orders) of 735 kv. transformers from ABB amounted to \$83.2 million over the

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<sup>1</sup> This calculation makes use of unit values provided by Hydro Quebec. These values are exclusive of taxes and "profit" on domestic orders and exclusive of customs duties and taxes on the foreign order.

period 1980-89 (82 percent of the total) with Canadian General Electric and subsequently TTI supplying the remaining 18 percent (\$18.4 million) and foreigners supplying nothing.<sup>1</sup> It is reasonable to believe that the foreign suppliers ultimately asked to quote on a continuing basis will get more of this business than competing Canadian suppliers have in the past.

### Ontario Hydro

17. Ontario Hydro has confirmed that it has changed its policy regarding transformer purchases. For at least ten years prior to 1989, Ontario Hydro purchased its transformer requirements from domestic suppliers. There were two reasons for this. First its requirements were small relative to available domestic capacity. Second, there were a number of competing domestic suppliers.
  
18. Ontario Hydro is building its relationships with foreign suppliers for several reasons. First, it has a large investment program planned and is of the opinion that other utilities will be in a similar position. The value of new orders placed over the next five years may be such as to result in delays in delivery from domestic suppliers.

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<sup>1</sup> ABB's share would be larger if the values of these purchases were expressed in constant dollar terms.

Foreign suppliers may be able to offer more timely delivery. Indeed one foreign supplier has already done so. This transaction is described below.

19. Second, Ontario Hydro is of the opinion that with the decrease in the number of competing domestic suppliers it is "worthwhile every now and again" to seek competitive bids to keep domestic suppliers "on their toes".
  
20. An official of Ontario Hydro listed four foreign suppliers with whom it has negotiated or discussed doing business. These are:
  - o NEI-Peebles (Scotland)
  - o Siemens (Germany)
  - o Alsthom-GEC (France)
  - o McGraw-Edison (U.S.)
  
21. In August of 1989 Ontario Hydro placed an order for two 750 MVA autotransformers with NEI-Peebles for delivery in August 1990. The total value of this order is close to \$12 million which makes it a relatively large order. There is also an option to purchase a third unit. Ontario Hydro chose Peebles because they had "a high degree of assurance" that it could deliver on time. An official of Ontario Hydro stated that Peebles was "reasonably competitive" on price.

22. Siemens was also seeking the order that went to Peebles. Siemens is regarded by Ontario Hydro as a good potential supplier with whom they will do business in the future. Siemens has been asked to quote on a contract to supply three 125 MVA transformers. Bidding closes November 28 on this contract. It is note-worthy that TTI was not asked to quote on this contract for the reason that TTI could not in Hydro's opinion, meet the delivery deadline.<sup>1</sup>
  
23. Ontario Hydro has also been approached by both Alsthom-GEC and McGraw Edison and discussions have been held with them. Both companies appear to be less immediate possibilites as suppliers.
  
24. The value of orders for transformers with a base rating above 50 MVA placed by Ontario Hydro to date in 1989 is \$42 million. The order to NEI-Peebles is the only foreign order placed by Ontario Hydro to date. It constitutes 29 percent of this total.

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<sup>1</sup> ABB commercial intelligence verbally confirmed to ABB by Mr. John Frogatt, Ontario Hydro Contract Engineer.



B.C. Hydro

25. B.C. Hydro puts all its transformer requirements up for tender. Bids are reported publicly. From B.C. Hydro bid read-outs, the Vancouver office of ABB has calculated that in 1989 to date B.C. Hydro has placed orders for transformers in the amount of \$10.7 million of which 69 percent went to foreign suppliers.

26. The details of the contracts awarded are as follows:<sup>1</sup>

(1) One 400 MVA phase shifter:<sup>2</sup>

(a) bidders:

- o Electrical Systems (Rade Koncar, Yugoslavia).
- o McGraw Edison Power Systems (U.S.).
- o Siemens Electric (Germany).
- o Asea Brown Boveri (Canada).
- o Transelectrix Technology (Canada).

(b) Winner: McGraw Edison (U.S.).

(c) Estimated order value: \$6 million.

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<sup>1</sup> The list of bidders is from B.C. Hydro. The winning bidder and the estimated value of the order is from ABB commercial intelligence.

<sup>2</sup> This order is reported in Dr. Mathewson's affidavit. The bids were opened in 1988 and the order placed in 1989. ABB intelligence is that the value of the order was negotiated downward to \$6 million.

2) Two 75 MVA transformers:

(a) Bidders:

- o Prolec (Mexico).
- o Hyundai (Korea).
- o Federal Pioneer (Canada).
- o Transelectrix Technology (Canada).
- o Asea Brown Boveri (Canada).

(b) Winning bidder: Prolec, Hyundai (one each).

(c) Estimated order value: \$1.4 million.

(3) Two 150 MVA autotransformers:

(a) Bidders:

- o Hyundai (Korea).
- o Prolec (Mexico).
- o Federal Pioneer (Canada).
- o Transelectrix Technology (Canada).
- o Smit (Holland).
- o Asea Brown Boveri (Canada).

(b) Winning bidder: Federal Pioneer.

(c) Estimate order value: \$3.3 million.

27. ABB commercial intelligence is that while the bid submitted by TTI on the 400 MVA phase shifter was relatively low it was assessed penalties, apparently as a consequence of delivery problems, and was not awarded the contract.

28. Bids have been opened on a contract for a 150 MVA transformer but, as of November 24, 1989 a contract has not been awarded.

The bidders are:

°Federal Pioneer (Canada).

°Hyundai (Korea).

°AGG (Germany).

°Asea Brown Boveri (Canada).

°Smit (Holland).

ABB'S commercial intelligence is that this contract is likely to go to either Federal Pioneer or Hyundai. Although comparison of bids is often hazardous without more detailed information, it is interesting to note that the bids of both Hyundai and AEG are below Federal Pioneer.<sup>1</sup> It is also interesting that TTI did not bid.

29. My impression is that the proportion of B.C. Hydro transformer purchasers which have historically gone to foreign suppliers is well below 69 percent. ABB estimates B.C. Hydro's 1988 foreign orders at \$1.3 million but has not estimated 1988 domestic orders. The list of known sales by foreign suppliers reported in the ABB submission of March 31, 1989 does not

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<sup>1</sup> Based on a comparison of Option A bids.

show any purchases in this size class by B.C. Hydro in recent years.<sup>1</sup> This large increase in the proportion of orders going to foreigners in 1989 may be partly a result of increased aggressiveness by foreign suppliers, partly of result of the appreciation of the Canadian dollar and partly due to chance. Since B.C. Hydro is obliged to accept the lowest acceptable bid the type of policy change which has occurred at Ontario Hydro and Hydro Quebec cannot be inferred to have occurred at B.C. Hydro.

#### Other Purchases

30. There is fragmentary evidence of other purchases of transformers from foreign suppliers or the possibility thereof. Hyundai is thought by ABB to have bid on several orders to be placed by TransAlta utilities. TransAlta has confirmed that it has, in past, received international bids on one of its requests for quotations.
31. ABB commercial intelligence is that Howe Sound Pulp and Paper ordered three 69 MVA transformers in 1988 for delivery in September 1989 from Hyundai. Estimated value is \$4.2 million.

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<sup>1</sup> "Submission Pursuant to Article 401.5 of the Canada-United States Free Trade Agreement Re: Acceleration of Tariff REduction in Respect of Certain Electrical Power Transformers". Appendix A. This list was compiled in 1988.

Orders Received by Domestic Manufacturers

32. The value of orders received by domestic producers of transformers is tabulated for 1988 and 1989 (to August) in Table 1. An estimate for 1989 is also reported. This is obtained by calculating the ratio of 1988 to 1989 cumulative orders as of August and multiplying the result by the 1988 total.

33. Orders are reported for two EEMAC categories. These are transformers over 50 MVA but under 362 kv. and transformers over 362 kv. Estimated 1989 orders for both categories taken together are \$87.2 million.

Table 1

Orders for Very Large and EHV  
and DC Converter Transformers Placed with  
Canadian Suppliers (000\$)

<u>Category</u>	<u>1988</u>	<u>August 1988</u>	<u>August 1989</u>	<u>1989 Estimate</u>
Over 50 MVA; Under 362 kv.	85,767	67,886	45,922	58,018
Over 362 kv.	42,207	34,561	23,865	21,144
Total	127,974	102,447	69,787	87,162

Source: EEMAC (From ABB)

Foreign Orders as a Percentage of Total Orders  
Placed by Canadian Customers

34. The value of foreign orders placed by Ontario Hydro, Hydro Quebec and B.C. Hydro for power transformers rated over either 50 MVA or 362 kv. is 26.4 million 1989 to date. Further foreign orders could be announced before the year end. Other buyers may also have placed import orders. As a result, import could exceed \$26.4 million. Some of the orders received by domestic producers may have been for export. As a result, estimated 1989 domestic demand could be lower than \$87.2 million.
35. Taking 1989 foreign orders as they stand and assuming all orders received by domestic producers are from Canadian buyers, imports will account for 23 percent of domestic purchases in 1989. As far as can be ascertained this represents a considerable increase over 1988. Neither Ontario Hydro nor Hydro Quebec purchased any transformers in these categories from abroad in 1988 and B.C. Hydro's foreign purchases could have been as low as \$1.3 million.
36. Given that Ontario Hydro and Hydro Quebec formerly had stated policies of relying on domestic suppliers and that there is no indication of large foreign purchases from B.C. Hydro in the years prior to 1988, the 23 per cent import share estimated for

1989 would appear to constitute a distinct break with past practice in this industry.

### Conclusions

37. Foreign suppliers of transformers are now playing a much larger role in the Canadian market than they have for many years. After years of relying on domestic suppliers Ontario Hydro and Hydro Quebec have sought out, placed orders with and are continuing to solicit quotations from foreign suppliers. Although there is no evidence of an explicit change in policy, B.C. Hydro has placed foreign orders that appear to be well in excess of anything it has placed previously.
  
38. An assumption implicit in the hold separate agreement is that foreign competition would not become a significant factor until tariff changes were actually approved. This assumption does not appear to be valid any longer. My understanding is that there is a very high probability that orders placed now will be eligible either for complete duty remission or a reduced tariff (depending, of course, on their size class and country of origin) when they are actually delivered which would be late 1990 at the earliest. The operation of the market appears to be (properly) anticipating impending tariff changes.

39. Another assumption implicit in the hold separate agreement is that an independent TTI would effectively constrain ABB (and vice versa) until tariff changes are approved. Several comments are appropriate here. There is some evidence that, due to its delivery problems, TTI is less of a competitive factor than might have been anticipated. It appears as if the utilities, especially Hydro Quebec, have already adopted a strategy of playing ABB off against foreign supplier(s) rather than against TTI.
40. It is clear that a change in the hold separate agreement that eliminated TTI as an independent bidder would not eliminate competition in the supply of transformers. Nor would it, at this point, eliminate a particularly strong competitor. Yet it would eliminate a competitor. This does not, however, appear to be a market in which the degree of competition is perceived to increase linearly with the number of competitors. Hydro Quebec is explicitly seeking out three suppliers from which to solicit quotations. This approach is implicit in Ontario Hydro's recent actions. Indeed, in commenting on the case (referred to above) in which TTI was not invited to quote on two 125 MVA transformers, an Ontario Hydro official remarked that they were able to find "sufficient competition" elsewhere. Three firms, Siemens, ABB and Federal Pioneer were invited to quote.



41. It appears, then, that the elimination of TTI as an independent bidder would still leave what the largest buyers would consider to be sufficient competition. Indeed with Jeumont Schnieder, NEI-Peebles, McGraw Edison, Siemens and possibly Alsthom, Fuji, Hyundai, Prolec and others active or potentially active in Canada, it should not prove difficult to get the requisite number of quotations.
  
42. The only downside I can see to the elimination of the hold separate lies in the apparently now remote possibility that the tariff changes are not approved. The competitiveness of foreign suppliers would be reduced and ABB could take advantage of this until the backstop divestiture remedy took effect. This need not be a long period and, given their size, the utilities would not be without strategies for countering any advantage which might accrue temporarily to ABB.
  
43. Accordingly I conclude that there is now significant international competition as evidenced by the purchases by Hydro Quebec and Ontario Hydro which did not exist at the time of the issuance of the Consent Order. I also conclude that TTI appears to have declined as a competitive force in the market.