CANADIAN INTERNATIONAL TRADE TRIBUNAL
TRIBUNAL CANADIEN DU COMMERCE EXTÉRIEUR

Ottawa, Tuesday, June 19, 1990

Review No.: RR-89-004

IN THE MATTER OF a review under section 76 of the *Special Import Measures Act* of the findings of material injury of the Anti-dumping Tribunal dated July 27, 1976, February 29, 1980, July 14, 1983, and September 7, 1984, respecting:

HYDRAULIC TURBINES ORIGINATING IN THE UNION OF SOVIET SOCIALIST REPUBLICS; HYDRAULIC TURBINES ORIGINATING IN OR EXPORTED FROM JAPAN, OR FROM THE PEOPLE'S REPUBLIC OF CHINA AND INTRODUCED INTO THE COMMERCE OF CANADA BY OR ON BEHALF OF A MANUFACTURER, PRODUCER, VENDOR OR EXPORTER IN JAPAN; AND ALTERNATING CURRENT ELECTRIC GENERATORS ORIGINATING IN OR EXPORTED FROM ITALY AND JAPAN

O R D E R

The Canadian International Trade Tribunal, under the provisions of section 76 of the *Special Import Measures Act*, has conducted a review of the findings of material injury respecting:

- the finding of the Anti-dumping Tribunal dated July 27, 1976, concerning hydraulic turbines for electric power generation, not including bulb type turbines, originating in the Union of Soviet Socialist Republics in Inquiry No. ADT-4-76, continued in Review No. ADT-4B-76 on August 19, 1983;

- the finding of the Anti-dumping Tribunal dated February 29, 1980, concerning alternating current electric generators for use with hydraulic turbines or water-wheels, including components whether or not imported separately, for use in the assembly, construction or installation of such generators, as well as thrust bearings and generator shafts for use in association with or connected to such generators, but excluding in all cases excitation systems, originating in or exported from Japan in Inquiry No. ADT-11-79;

- the finding of the Anti-dumping Tribunal dated July 14, 1983, concerning alternating current electric generators for use with hydraulic turbines or water-wheels, including components whether or not imported separately, for use in the assembly, construction or installation of such generators, as well as thrust bearings and generator shafts for use in association with or connected to such generators, but excluding in all cases excitation systems, originating in or exported from Italy in Inquiry No. ADT-8-83. For greater clarity, the term component includes spare parts; and

365 Laurier Avenue West
Ottawa, Ontario K1A 0G7
(613) 990-2452 Fax (613) 990-2439

365, avenue Laurier ouest
Ottawa (Ontario) K1A 0G7
(613) 990-2452 Téléc. (613) 990-2439

- the finding of the Anti-dumping Tribunal dated September 7, 1984, concerning hydraulic turbines or original equipment components thereof, as well as spare parts and replacement runners, for use in the generation of electrical power, including all embedded, stationary, and rotating components, whether or not imported separately, but excluding governor control actuators and turbine inlet valves, originating in or exported from Japan, or originating in or exported from the People's Republic of China and introduced into the commerce of Canada by or on behalf of a manufacturer, producer, vendor or exporter in Japan in Inquiry No. ADT-9-84.

Pursuant to subsection 76(4) of the *Special Import Measures Act*, the Canadian International Trade Tribunal hereby rescinds the above-mentioned findings of July 27, 1976, February 29, 1980, July 14, 1983, and September 7, 1984, effective June 19, 1990.

Kathleen E. Macmillan
Kathleen E. Macmillan
Presiding member

Robert J. Bertrand, Q.C.
Robert J. Bertrand, Q.C.
Member

W. Roy Hines
W. Roy Hines
Member

Robert J. Martin
Robert J. Martin
Secretary

CANADIAN INTERNATIONAL TRADE TRIBUNAL
TRIBUNAL CANADIEN DU COMMERCE EXTÉRIEUR

Ottawa, Tuesday, June 19, 1990

Review No.: RR-89-004

HYDRAULIC TURBINES ORIGINATING IN THE UNION OF SOVIET SOCIALIST REPUBLICS; HYDRAULIC TURBINES ORIGINATING IN OR EXPORTED FROM JAPAN, OR FROM THE PEOPLE'S REPUBLIC OF CHINA AND INTRODUCED INTO THE COMMERCE OF CANADA BY OR ON BEHALF OF A MANUFACTURER, PRODUCER, VENDOR OR EXPORTER IN JAPAN; AND ALTERNATING CURRENT ELECTRIC GENERATORS ORIGINATING IN OR EXPORTED FROM ITALY AND JAPAN

Special Import Measures Act - Whether to rescind or continue, with or without amendment, the Anti-dumping Tribunal's findings relating to the above-mentioned goods - Domestic market demand - Procurement practices of provincial public utilities.

DECISION: The Canadian International Trade Tribunal rescinds the above-mentioned findings. The substantial protection provided to Canadian producers by Hydro-Quebec and other provincial public utilities and the strong outlook for domestic demand ensure a healthy market for Canadian producers in the 1990s. In addition, the Tribunal could find little indication of a propensity to dump by the named countries.

Place of Hearing:	Ottawa, Ontario
Dates of Hearing:	January 15-19, 1990
Date of Order and Reasons:	June 19, 1990
Tribunal Members:	Kathleen E. Macmillan, Presiding Member Robert J. Bertrand, Q.C., Member W. Roy Hines, Member
Director of Research:	Marcel Brazeau
Research Officers:	Richard Cossette and André Renaud
Registration and Distribution Clerk:	Lillian E. Pharand

365 Laurier Avenue West
Ottawa, Ontario K1A 0G7
(613) 990-2452 Fax (613) 990-2439

365, avenue Laurier ouest
Ottawa (Ontario) K1A 0G7
(613) 990-2452 Téléc. (613) 990-2439

Participants:

	John M. Coyne, Q.C.
for	GE Canada MIL Tracy (Division of the MIL Group Inc.) and DBS Escher Wyss
	(Manufacturers)
	John J.B. Gilliland and Kelvin S.S. Kucey
for	V/O Energomachexport Bering Electric Company Ltd. and E.S. Fox Limited
	(Importers)
	Richard S. Gottlieb, Donald J. Goodwin and Richard H. Pragnell
for	The Japan Electrical Manufacturers' Association and Fuji Electric Co., Ltd.
	(Exporters/Associations)

Witnesses:

Gordon E. Drew Manager Business Development Hydro - GE Canada	Robert C. Parkinson Director Manitoba Regional Office MIL Tracy
Keith G. Pomeroy Vice-President and Manager Marketing DBS Escher Wyss	Walter R. Fell Vice President and Manager, Hydro Power Systems & Services Department GE Canada
A.J. Mettler Manager - Finance DBS Escher Wyss	Jacques C. Daignault Vice-President - Marketing MIL Tracy
John E. Eastwood Director The Bering Company	Kevin G. Rickatson Project Manager E.S. Fox Limited

Sumio Miyakawa
Managing Director
The Japan Electrical Manufacturers' Association

Hisakichi Okamoto
Director
General Manager
Legal Department
Fuji Electric Co., Ltd.

Kazuo Kazumi
President
Sampole Enterprises Inc.

Mieko Kondo
Conference Interpreter

Address all communications to:

The Secretary
Canadian International Trade Tribunal
20th Floor
Journal Tower South
365 Laurier Avenue West
Ottawa, Ontario
K1A 0G7

CANADIAN INTERNATIONAL TRADE TRIBUNAL
TRIBUNAL CANADIEN DU COMMERCE EXTÉRIEUR

Ottawa, Tuesday, June 19, 1990

Review No.: RR-89-004

IN THE MATTER OF a review under section 76 of the *Special Import Measures Act* of the findings of material injury of the Anti-dumping Tribunal dated July 27, 1976, February 29, 1980, July 14, 1983, and September 7, 1984, respecting:

HYDRAULIC TURBINES ORIGINATING IN THE UNION OF SOVIET SOCIALIST REPUBLICS; HYDRAULIC TURBINES ORIGINATING IN OR EXPORTED FROM JAPAN, OR FROM THE PEOPLE'S REPUBLIC OF CHINA AND INTRODUCED INTO THE COMMERCE OF CANADA BY OR ON BEHALF OF A MANUFACTURER, PRODUCER, VENDOR OR EXPORTER IN JAPAN; AND ALTERNATING CURRENT ELECTRIC GENERATORS ORIGINATING IN OR EXPORTED FROM ITALY AND JAPAN

TRIBUNAL: KATHLEEN E. MACMILLAN, Presiding Member
ROBERT J. BERTRAND, Q.C., Member
W. ROY HINES, Member

STATEMENT OF REASONS

SUMMARY

This is a review under section 76 of the *Special Import Measures Act* (SIMA) by the Canadian International Trade Tribunal (the Tribunal) of the findings of material injury of certain hydraulic turbines and alternating current electric generators. In conducting its review of the findings, the Tribunal addressed two essential questions -what is the propensity to dump if the findings are rescinded and how vulnerable is the domestic industry to resumed dumping of the subject goods?

With respect to vulnerability of the domestic industry, the Tribunal observed that according to both industry and staff forecasts, the Canadian producers - GE Canada, MIL Tracy and DBS Escher Wyss for turbines, and GE Canada and MIL Tracy for generators - were facing significantly higher order levels for hydrogeneration equipment in the 1990 to 1995 period than had existed during the 1980s. Furthermore, the vast majority of hydro projects forecast for the next decade would be closed to foreign producers by virtue of the procurement practices of Hydro-Quebec and Ontario Hydro. The Tribunal concluded that the improved order schedule forecast for the 1990s and the substantial protection offered by provincial purchasing policies, combined with the successful performance of Canadian firms in export markets and their healthy levels of plant loading, indicated that the Canadian industry was not vulnerable to dumped imports.

365 Laurier Avenue West
Ottawa, Ontario K1A 0G7
(613) 990-2452 Fax (613) 990-2439

365, avenue Laurier ouest
Ottawa (Ontario) K1A 0G7
(613) 990-2452 Téléc. (613) 990-2439

Turning to the propensity to dump, the Tribunal noted that Japanese producers of turbines and generators had not exported to Canada during the time that the relevant findings had been in place. The Tribunal found no clear indication of a "plant loading imperative" on the part of Japanese producers and noted that Canadian firms had previously competed successfully against Japanese firms in export markets.

Concerning imports of turbines from the USSR, the Tribunal attached significance to the recent formation of a joint venture between The Bering Company of the United States and Soviet turbine manufacturers, granting this joint venture the distribution rights for Soviet hydrotechnology in the North American market. The Tribunal considered it unlikely that such a venture would risk incurring a dumping action in Canada.

The Tribunal also found little indication of a propensity to dump on the part of the Italian generator producer. With respect to all countries concerned, the Tribunal viewed the provisions of SIMA, that allow initiation of anti-dumping proceedings on the basis of a dumped tender, as providing a deterrent to dumping in the Canadian market.

On the basis of little indication of either a propensity to dump by the named countries or of material injury on the part of the Canadian industry, the Tribunal hereby rescinds the findings of material injury respecting the subject hydraulic turbines and alternating current electric generators.

BACKGROUND

This is a review under section 76 of SIMA of the four findings of material injury respecting heavy hydro-electrical power equipment, two covering turbines and two covering generators. The particulars of these four findings are as follows:

- the finding of the Anti-dumping Tribunal dated July 27, 1976, concerning hydraulic turbines for electric power generation, not including bulb type turbines, originating in the Union of Soviet Socialist Republics in Inquiry No. ADT-4-76, continued in Review No. ADT-4B-76 on August 19, 1983;

- the finding of the Anti-dumping Tribunal dated February 29, 1980, concerning alternating current electric generators for use with hydraulic turbines or water-wheels, including components whether or not imported separately, for use in the assembly, construction or installation of such generators, as well as thrust bearings and generator shafts for use in association with or connected to such generators, but excluding in all cases excitation systems, originating in or exported from Japan in Inquiry No. ADT-11-79;

- the finding of the Anti-dumping Tribunal dated July 14, 1983, concerning alternating current electric generators for use with hydraulic turbines or water-wheels, including components whether or not imported separately, for use in the assembly, construction or installation of such generators, as well as thrust bearings and generator shafts for use in association with or connected to such

generators, but excluding in all cases excitation systems, originating in or exported from Italy in Inquiry No. ADT-8-83. For greater clarity, the term component includes spare parts; and

- the finding of the Anti-dumping Tribunal dated September 7, 1984, concerning hydraulic turbines or original equipment components thereof, as well as spare parts and replacement runners, for use in the generation of electrical power, including all embedded, stationary, and rotating components, whether or not imported separately, but excluding governor control actuators and turbine inlet valves, originating in or exported from Japan, or originating in or exported from the People's Republic of China and introduced into the commerce of Canada by or on behalf of a manufacturer, producer, vendor or exporter in Japan in Inquiry No. ADT-9-84.

Pursuant to section 76 of SIMA, the Tribunal initiated a review of the findings and issued a notice of review on October 18, 1989. This notice was forwarded to all known interested parties and was published in Part I of the October 28, 1989, edition of the Canada Gazette.

As part of its review, the Tribunal sent detailed questionnaires to Canadian manufacturers, public utilities and users of the subject goods. From the replies to the questionnaires and other sources, the Tribunal's research staff prepared public and protected pre-hearing staff reports relative to the review. In addition, the record of this review consists of all relevant documents, including the original findings, the Notice of Review and public and confidential sections of the replies to questionnaires. All public exhibits were made available to interested parties and protected exhibits, to independent counsel only.

Public and *in camera* sessions were held in Ottawa, Ontario, from January 15 to January 19, 1990.

GE Canada, MIL Tracy and DBS Escher Wyss, manufacturing companies, were represented by counsel at the hearing, submitted evidence and made argument in support of maintaining the findings.

V/O Energomachexport, Bering Electric Company Ltd. (BEC), and E.S. Fox Limited (Fox), exporter, potential importer and potential producer of the subject goods respectively, were represented by counsel at the hearing, submitted evidence and made argument in support of rescinding the findings.

The Japan Electrical Manufacturers' Association (JEMA) and Fuji Electric Co., Ltd. (Fuji), an exporter of the subject goods, were also represented by counsel at the hearing, submitted evidence and made argument in support of rescinding the findings.

THE PRODUCTS

The products subject to this review are turbines and generators.

Turbines

For purposes of the first finding (ADT-4-76), the subject goods were defined as:

> *... hydraulic turbines for electric power generation, not including bulb type turbines, originating in the Union of Soviet Socialist Republics.*

In the second inquiry (ADT-9-84), the goods were more broadly defined as:

> *... hydraulic turbines or original equipment components thereof, as well as spare parts and replacement runners, for use in the generation of electrical power, including all embedded, stationary, and rotating components, whether or not imported separately, but excluding governor control actuators and turbine inlet valves, originating in or exported from Japan, or originating in or exported from the People's Republic of China and introduced into the commerce of Canada by or on behalf of a manufacturer, producer, vendor or exporter in Japan.*

Hydraulic turbines are used to convert the energy of falling water into mechanical torque which in turn drives hydrogenerators to produce electricity. There are five basic types of hydraulic turbines used in Canada, and the type chosen for a particular project is dependent upon a number of factors, including the head or height of the waterfall, the rate of water flow and the fluctuations of water flow.

The most common design used in Canada is the Francis turbine, selected when the head is generally between 100 feet and 2,000 feet and the water flow is relatively constant.

There are two types of propeller turbines, the fixed blade and the Kaplan design. The fixed blade turbine is for low head applications where there is a relatively large volume of water. The Kaplan turbine is a propeller type which allows for the blade to be adjusted to various angles and is suited to varying flow conditions. A further variation of the Kaplan turbine is the "S" type, which is a horizontally functioning Kaplan-type turbine. Both propeller types are utilized for low head applications with large water flow.

The third common type is the impulse or Pelton turbine which is utilized under conditions of small flow and high heads which exceed levels under which Francis turbines could be used. A fourth design, the pump turbine, is reversible in rotation and is designed to operate as a turbine during periods of peak power demand and as a pump during periods of low power demand. The fifth type is the low head horizontal turbine which can be a bulb, tube or straight flow or pit design.

Generators

For purposes of the 1979 inquiry involving Japan (ADT-11-79), the goods were defined as:

> *... alternating current electric generators for use with hydraulic turbines or water-wheels, including components whether or not imported separately, for use in the assembly, construction or installation of such generators, as well as thrust bearings and generator shafts for use in association with or connected to such generators, but excluding in all cases excitation systems, originating in or exported from Japan.*

For the second finding (ADT-8-83), the generators were described likewise, with the added clarification that the term components included spare parts.

Generators are devices for converting energy extracted from flowing water by hydraulic turbines into electrical energy. Despite certain common basic electromagnetic and mechanical design characteristics, the design of each hydrogenerator is customized to the unique hydraulic characteristics of the site and the electrical system into which the generator output is fed. The suppliers apply their own engineering and design criteria in developing units to meet the specific requirements of each individual project site. Among the variables which must be accommodated in the design are the power capacity available from the turbine, the speed of rotation of the turbine, the voltage output of the generator and the power factor of the system.

Hydro capacity and site development

It has been estimated that, as of the end of 1988, installed hydro capacity in Canada reached approximately 57.5 GW, or about 57 percent of total Canadian electric power capability; nuclear power, coal and oil made up much of the other 43 percent. Future additions are expected to be dominated by hydro and the outlook is for robust growth over the next 10 to 15 years. Canada is expected to become the number one producer of hydro-electric energy in the world by the year 2000.[1]

In Canada, the overwhelming majority of large hydraulic turbines and generators, as well as related equipment, are purchased by provincial public utilities. Five public utilities dominate the market. Hydro-Quebec had about 41 percent of Canada's hydro-electric power generation capability at the end of 1988. BC Hydro was a distant second with 16 percent. Ontario Hydro and Newfoundland and Labrador Power had about 11 percent each. Manitoba Hydro accounted for another 6 percent of the installed hydro capability.

The development of a hydro-electric site may often take as long as 10 years from planning to operation. The cycle begins with a study of the river, its speed, flow and drop. The river must then be dammed, structures built, and power houses erected. Turbines, generators, transformers and accessory equipment are then brought to the site for assembly and installation.

---

1. Hydro Power, December 1989, HCI Publications.

Subsequent to site selection and the determination of specifications, the public utilities normally call for tenders which specify time frames and other relevant parameters. Prior to filing a bid, the suppliers perform lengthy and costly preliminary engineering studies. Although manufacturers draw heavily on their past experience when submitting bids, each project is unique and, therefore, requires that each turbine and generator be customized to meet the purchaser's requirements. To ensure that operating specifications can be met, the public utility normally requires model tests by the suppliers, which add significant costs to the contract.

The technical complexity, uniqueness and sheer size of the products necessitate a highly skilled engineering and manufacturing team and large capital investments. The design and production stages for a turbine or generator typically require from two to five years prior to shipment.

Furthermore, the weight and size of many of the turbine and generator components often require that assembly take place on site. Transportation of the components and on-site installation represent a significant percentage of the contract price.

THE DOMESTIC INDUSTRY

For this review, Canadian manufacturers of hydraulic turbines, GE Canada, MIL Tracy and DBS Escher Wyss, joined in opposition to the rescission of the turbine findings under review. Similarly, GE Canada and MIL Tracy, two producers of hydrogenerators, also joined to oppose rescission of the two generator findings under review. The three turbine manufacturers and the two generator manufacturers account for the vast majority of production in Canada in their respective industries. While there are several other manufacturers, they account for a very small percentage of domestic manufacturing and consist mostly of small units of less than one megawatt. These are not utilized in projects of the magnitude under consideration in this review.

GE Canada, formerly known as Canadian General Electric (CGE), is a 100-percent owned subsidiary of the General Electric Company which has headquarters in Fairfield, Connecticut. GE Canada's hydro business has its headquarters and primary manufacturing plant for both large generators and turbines in Lachine, Quebec. This facility was part of Dominion Engineering Ltd., which was formerly a wholly owned subsidiary of CGE, and is still frequently referred to as Dominion Engineering Works or "DEW."

GE Canada, which has a world product mandate for hydro-electric equipment, has manufactured hydrogenerators since 1898 and turbines since 1922. GE Canada has been in the forefront of research and development and has supplied some of the world's largest units. For example, the company installed generators of 826,000 MVA and turbines exceeding 1,000,000 HP at the Grand Coulee power station in the USA.

MIL Tracy is a division of the MIL Group Inc. Since its founding in 1937, MIL Tracy has developed a worldwide reputation for the design, manufacture, installation and maintenance of heavy industrial equipment and systems. Known originally as Marine Industries Ltée (MIL), the company has evolved from a sole focus on shipbuilding to one of Canada's largest industrial complexes.

The MIL Group Inc.'s shareholders are the Société Générale de Financement du Québec (SGF) with a 65-percent holding and Alsthom, a large French industrial group, with 35 percent. The other divisions of the MIL Group Inc. are MIL Davie, MIL Systems Engineering and MIL Vikers.

The company's wide range of products includes Francis, Pelton, Kaplan and propeller turbines, generators, synchronous condensers, pump and bulb turbines, replacement and upgrade parts, low speed, large capacity electric motors, valves and various other hydrogeneration equipment.

MIL Tracy has participated in numerous major Canadian power generation projects, including Churchill Falls, Manic-Outardes, La Grande and Dorsey. Internationally, it has manufactured and installed hydro-electric systems in Kenya, Mali, China, Ecuador, India and the United States. Over the past 25 years, MIL Tracy has supplied in excess of 15,000 MW of hydraulic turbines and generators to the Canadian and international markets.

DBS Escher Wyss is a division of Sulzer Canada Inc., a Canadian corporation wholly owned by Sulzer Brothers Ltd. of Winterthur, Switzerland. The company's hydraulic products are engineered and built in Canada under license from the Sulzer Escher Wyss division of the parent company. DBS Escher Wyss originated from the purchase in 1979 by Sulzer Brothers of 49 percent of the Lachine, Quebec, assets of AMCA International Ltd. (formerly Dominion Bridge) and the consequent formation of Dominion Bridge Sulzer Inc. This joint venture was subsequently restructured in January 1988 with appropriate division of the facility into DBS Escher Wyss and Dominion Bridge - Quebec.

DBS Escher Wyss has its head office and plant in Lachine, Quebec, from which it addresses the Canadian, US and selected offshore markets for hydraulic turbines. The design and manufacturing program of DBS Escher Wyss covers the complete spectrum of turbine types with unit outputs ranging from 1 MW to over 400 MW. While not a generator manufacturer, DBS Escher Wyss also supplies, as a prime contractor, small hydro projects on a turnkey, "water-to-wire" basis.

Since its formation in 1980, the company has delivered or received contracts for over 40 turbines totalling about 3,000 MW, 40 percent of which were destined for the Canadian market. Canadian projects include the introduction of new technologies, such as the Straflo turbine.

In August 1989, Sulzer Brothers Inc. and J.M. Voith GmbH of Heidenheim, a large manufacturer of paper-making machinery and hydraulic turbines, signed an agreement to amalgamate their respective businesses. This will make DBS Escher Wyss part of the world's largest hydroturbine company.

In recent years, GE Canada, MIL Tracy and DBS Escher Wyss have undergone significant organizational changes through divestiture, rationalization of product lines and investment, with the result that their respective manufacturing facilities are now devoted largely to "hydro" products. The Canadian producers are now world-class competitors. GE Canada, with its world product mandate for hydro-electric equipment, has rationalized its operations and is a successful player on the international scene.

MIL Tracy, as part of a larger group having ties with Alsthom (France) and Neyrpic (France), benefits from technical and commercial cooperation. DBS Escher Wyss, the third Canadian producer, is now part of the world's largest hydroturbine company, as a result of the amalgamation of Sulzer Brothers Inc. and J.M. Voith GmbH in August 1989.

SUMMARY OF PAST FINDINGS

A) Turbines

There are two findings concerning turbines. The first finding covers hydraulic turbines for electric power generation, not including bulb type turbines originating in the Union of Soviet Socialist Republics. In this finding, issued on July 27, 1976, the Anti-dumping Tribunal found that dumping had not caused and was not causing, but was likely to cause material injury to the production in Canada of like goods (ADT-4-76). The finding was reviewed and continued on August 19, 1983 (ADT-4B-76). A second inquiry involved hydraulic turbines and original equipment components as well as spare parts and replacement runners and included all embedded, stationary and rotating components, whether or not imported separately, but excluded governor control actuators and turbine inlet valves originating in or exported from Japan, or from the People's Republic of China and introduced into the commerce of Canada by or on behalf of a manufacturer, producer, vendor or exporter in Japan. The Anti-dumping Tribunal issued a finding on September 7, 1984, that the dumping of these turbines and parts, excluding replacement runners, had caused, was causing and was likely to cause material injury to the production in Canada of like goods.

i) 1976 Finding - Turbines from the USSR

In this inquiry, the industry alleged that, because of the nature of the business which required some four to six years from the time the order was placed to delivery of the product, the loss of orders due to dumping in Canada during 1971-75 would lead to a loss of production and underutilization of capacity, with consequent effect on employment and profitability in the years 1977, 1978 and 1979. The industry alleged further that the loss of large domestic orders would have damaging repercussions on its position in export markets. Furthermore, it claimed that the threat of further injury from future dumping could result in the demise of the domestic turbine industry.

The domestic industry at the time consisted of two producers, DEW, a subsidiary of CGE and MIL.

In its consideration of material injury, the Anti-dumping Tribunal looked at three hydraulic power generating projects involving dumped turbines from the USSR. In two cases, Mica, British Columbia, and Peace Site, British Columbia, the Anti-dumping Tribunal found no past or present injury because DEW would not have been successful in the absence of dumping, since it had tendered a bid which was higher than the second lowest bidder (Hitachi, Japan). In the third case, Mactaquac, New Brunswick, while the Anti-dumping Tribunal could reasonably conclude that DEW would have been awarded the contract in the absence of dumping, it was not persuaded that the loss of this one order, because of its relatively small size, could have, of itself, resulted in material injury to domestic production. Therefore, the Anti-dumping Tribunal concluded

that the dumping found by the Deputy Minister as represented by the three contracts that had been reviewed had not caused and was not causing material injury to the production in Canada of like goods.

In looking at the likelihood of material injury, the Anti-dumping Tribunal proceeded on the assumption that the USSR would continue to dump the subject hydraulic turbines unless inhibited by the imposition of anti-dumping duties. It was of the opinion that, apart from Quebec where it was assumed that the two Canadian producers would continue to be given preference, there were substantial awards in the offing in other provinces in Canada where price was the primary consideration. The Anti-dumping Tribunal noted that the characteristics of the market, such as the small annual number of awards, the magnitude of their value and the long cycle from award of contract to shipment, significantly affected planning in such a capital-intensive industry and made it particularly vulnerable to disruption caused by dumping practices. The Anti-dumping Tribunal was satisfied, after looking at the extent of the injury caused by the loss of a single substantial contract by way of reduced utilization of capacity as expressed in person-hours lost and reduced profitability, that continued dumping from the USSR was likely to cause material injury.

ii) Review of the 1976 Finding

In the 1983 review of the 1976 finding concerning turbines from the USSR, the Anti-dumping Tribunal found no reason to rescind or change the said finding.

In reviewing the matter, the Anti-dumping Tribunal addressed itself to two questions, namely, whether conditions had changed sufficiently to warrant rescission and whether dumping would resume, if the finding were rescinded.

While the Anti-dumping Tribunal, in 1976, noted that a number of significant turbine awards were in the offing between 1976 and 1979, by the time of the review in 1983, for the most part, those contracts had been fulfilled. However, in the late 1970s, a number of unforeseen factors, such as energy conservation and the ensuing recession, began to have a negative effect on electrical energy consumption, and between 1978 and 1982, peak demand growth declined to 3 percent annually, half of what it had been in the early 1970s. Consequently, new requirements for generating capacity diminished and the number and the size of turbine awards fell accordingly. No domestic turbine awards were anticipated until 1985-86.

It was clear to the Anti-dumping Tribunal that the industry was facing a severe market trough which had impacted and would continue to impact on the domestic industry and which would leave it in a most vulnerable position should dumping recur when the market improved in the mid 1980s. In addition, domestic market competition for the limited number of available awards would be further intensified with the added production capacity of Canada's newest manufacturer, at that time, DBS (Dominion Bridge-Sulzer Inc.) Montréal, Quebec. Moreover, because profits are not earned on a contract until it is essentially completed, awards obtained in the mid to late 1980s would not reflect on profitability until the 1990s, again leaving the producers financially vulnerable to renewed dumping.

In the four years 1984 through 1987, about 70 percent of the awards in Canada would be for projects outside the province of Quebec and would therefore be open to foreign bids. Moreover, the anticipated awards were few in number and large in size. Under these circumstances, the Anti-dumping Tribunal was of the opinion that the loss of any one of these awards to dumped products would have serious repercussions for the domestic industry. Furthermore, potential bids made at dumped levels in this segment of the market would, in all probability, have caused price offerings to be suppressed in the "closed" Quebec market.

Evidence adduced at the hearing persuaded the Anti-dumping Tribunal that the market forces which had created a trough domestically were equally at play on the international market. That market was characterized by falling demand and substantial excess capacity which led accordingly to intense competition in bidding on the few projects which were available, often at prices which did not appear to cover full production costs. On the basis of the evidence, the Anti-dumping Tribunal was also persuaded that if the exporter were permitted to engage in competitive tender in the Canadian market, the prices offered could be expected to be such as to constitute dumping. Moreover, evidence respecting the active participation of the USSR on the international market, whether through open tender bidding or through bilateral arrangements, convinced the Anti-dumping Tribunal that the exporter would aggressively pursue any available awards on the domestic market if the finding were rescinded.

iii) 1984 Finding - Turbines from the People's Republic of China and Japan

In this inquiry, the Deputy Minister had found dumping with respect to two contracts, Upper Salmon (Newfoundland and Labrador) and Nipawin (Saskatchewan). The Anti-dumping Tribunal issued its finding of material injury on September 7, 1984.

The industry alleged that, as a result of the decline in the growth of electricity consumption, the industry was in a severe trough, and that the unique characteristics of the turbine market were all factors which led to severe competition. Further, had there been no dumping, the Nipawin contract would have been awarded to a Canadian producer rather than to the Japanese and Chinese exporters. (The Upper Salmon contract was awarded to a Canadian producer, notwithstanding dumping.) The industry indicated that, as a consequence of losing the contract, it suffered injury in the form of reduced employment and person-hours, decreased load level, lost sales and a negative financial impact.

In addition, the industry alleged that past and present injury was also evidenced in the form of price suppression caused by low Japanese bids subsequent to the Anti-dumping Tribunal's injury finding relating to turbines originating in the USSR in 1976. The low Japanese bids, it was argued, would continue to serve as reference price points for future projects.

Turning to the future, the industry submitted that because the market trough had been extended, it would continue to be vulnerable to dumping, and the loss of even one of the future contracts would be a devastating blow. In addition, most of the future awards would be made outside Quebec and would, therefore, be open to offshore competition.

In reviewing the matter, the Anti-dumping Tribunal noted that the central issue in the inquiry was simply whether the loss of the Nipawin award had caused material injury to the production of turbines. The Anti-dumping Tribunal found that, given the depressed conditions generally at the time of the award which continued to the time of issuing the finding, material injury "was caused by the present loss of the award and such injury continues to the present time, and will continue into the future." Given this conclusion, and considering the fact that the two lowest bids were entered by Japanese manufacturers and were found to be dumped, and the fact that the margin of dumping found, if added to the Japanese bid prices, would have increased their offers well beyond the bids of both domestic producers, and considering the importance of price in these matters, the Anti-dumping Tribunal determined that it was the dumping found by the Deputy Minister which had caused the loss of the Nipawin award, as well as the material injury flowing from such loss.

The Anti-dumping Tribunal indicated that the injury suffered principally took the form of reduced plant loading over a period of two or three years and the loss of more than 100,000 person-hours of production employment. The injury suffered in the time frame 1981 (call of tender) to 1985 (end of delivery) was not only material, but serious.

Furthermore, the Anti-dumping Tribunal was satisfied that, unless inhibited by the application of anti-dumping duties, the dumping practices of the Japanese turbine manufacturers would continue and would, in all likelihood, be the cause of material injury to the production in Canada in the future.

B) <u>Generators</u>

There are two findings concerning generators, both covering alternating current electric generators for use with hydraulic turbines or water-wheels, including components whether or not imported separately, for use in the assembly, construction or installation of such generators, as well as thrust bearings and generator shafts for use in association with or connected to such generators, but excluding in all cases excitation systems. The first finding covers goods originating in or exported from Japan. In this finding issued on February 29, 1980, the Anti-dumping Tribunal found that dumping of the generators and parts from Japan had not caused and was not causing, but was likely to cause material injury to the production in Canada of like goods (ADT-11-79). The second finding covers goods originating in or exported from Italy. In that finding issued on July 14, 1983, the Anti-dumping Tribunal found that the dumping of these generators and parts had caused, was causing and was likely to cause material injury to the production in Canada of like goods (ADT-8-83).

i) 1980 Finding - Generators from Japan

CGE alleged that the loss of large orders to low-priced dumped imports led to loss of production, underutilization of capacity, reduced profitability and reduced or deferred investment in research and development. Although the other Canadian producer, MIL, made no representation on its own behalf, it concurred with the allegations of injury.

The domestic industry, at the time of the finding, was composed of CGE and MIL.

In its consideration of material injury, the Anti-dumping Tribunal distinguished between the market in Quebec and outside Quebec. The Anti-dumping Tribunal considered that it seemed probable that the volume of business which MIL was to obtain in future years in Quebec would provide an adequate work load to support a profitable operation. Furthermore, it was noted that, as the Quebec market had been and was likely to remain closed to foreign suppliers, Japanese competition had not been and was not likely to be a problem for MIL.

While CGE could also expect to obtain a portion of the business in the Quebec market, it would only be a second supplier, after MIL, and would likely obtain only a limited and unpredictable share of that market. CGE's assured market, defined as "... any contract available in Ontario, and some or most of the contracts available from federally influenced agencies, e.g. NCPC (Northern Canada Power Commission) and Lower Churchill Development Corporation," was considered likely to be relatively small.

CGE faced increasing competitive pressure from Japanese producers in the larger and growing fraction of the Canadian market which was outside of Quebec, Ontario and areas of federal government influence and in export markets. At the time, the Japanese firms had been eligible to compete for eight projects in Canada, which had occurred in the previous five years, and they had been successful in five cases representing about 85 percent of the total volume of business. CGE was awarded the other three contracts.

CGE based its claim of past and present injury on four of the five contracts, three in British Columbia known as Site One, Seven Mile and Revelstoke and the Hind's Lake site in Newfoundland. The Anti-dumping Tribunal was satisfied that even in the absence of dumping CGE would not have been awarded the three mentioned BC contracts, owing to various considerations including a serious deterioration in the relationship between BC Hydro and CGE arising from a contract, awarded to CGE in 1967, for five generators at the Portage Mountain site. While the Anti-dumping Tribunal accepted that the success of the Japanese supplier in the Newfoundland contract was attributable to the dumping, it did not view the loss of that one small contract, in isolation, as amounting to material injury.

With respect to the likelihood of material injury to CGE in the future, the Anti-dumping Tribunal noted that, while no hydro projects of such magnitude and technology as Portage Mountain were ever trouble-free, these represented "something of an aberration" in CGE's otherwise satisfactory performance record both in Canada and in foreign countries. The Anti-dumping Tribunal indicated that there would be sufficient capacity available worldwide in the next few years to ensure vigorous competition for

those markets which were open to international bidding and that, in view of the long lead times from tender award to manufacturing activity and the state of CGE's order book, it seemed almost inevitable, in the Anti-dumping Tribunal's view, that in a couple of years CGE would find itself with much of its generation capacity unutilized. This situation, the Anti-dumping Tribunal noted, would become more serious unless CGE was able to limit the period of reduced activity by obtaining a substantial portion of the considerable volume of business expected to be awarded over the next few years in the open sector of the Canadian market, including BC Hydro, which the Anti-dumping Tribunal anticipated, might once again be willing to purchase CGE hydrogenerators. In light of that prospect, the Anti-dumping Tribunal concluded that CGE would in fact be able to obtain much of this Canadian business provided it did not have to compete with dumped imports, but concluded that if the Japanese dumping continued, CGE would be able to capture little if any of this important market.

ii) 1983 Finding - Generators from Italy

For this inquiry involving the dumping of generators and parts from Italy, CGE and MIL submitted that the dumping had caused and was causing material injury in the form of price suppression, reduced profitability and employment, deferred investment and impaired export performance. It was acknowledged that the past and present injury suffered was mainly to CGE, since MIL had only recently sought increased participation in that segment of the Canadian market in which dumping was likely to cause injury in the future, given the trough in the market over the next few years, uneconomic price levels required to meet dumped offshore bids and the need for plant loading. It was further submitted that, without a return to historical levels of profitability in the absence of dumping, the hydrogenerator business in Canada could not continue on a viable basis until the industry began to revive in the late 1980s.

The Anti-dumping Tribunal noted again that the industry consisted of CGE and MIL.

The major part of the evidence and discussion in this case revolved around the awards by Newfoundland Hydro for the supply of hydrogenerators for its Upper Salmon and Cat Arm developments, and by Saskatchewan Power Corporation for its Nipawin development.

In the first case, Upper Salmon, the Italian supplier, Ansaldo, was the lowest bidder, with CGE as the next lowest. CGE, at the time, pressing a dumping complaint involving Japanese hydrogenerators, filed a complaint of dumping against Ansaldo, and the Deputy Minister shortly thereafter initiated an investigation which affected the negotiations between the public utility and the lowest bidder, Ansaldo. In these circumstances, discussions were pursued with CGE and, upon the latter agreeing to reduce the price differential, it was awarded the contract.

In the second contract, Cat Arm, CGE's tender price was the lowest, with Ansaldo second and MIL, the other domestic producer, fourth. CGE was awarded the contract for Cat Arm.

CGE was awarded the contract for Nipawin as well. The project was of sufficient size, in CGE's judgement, to attract significant offshore interest, and it believed that Ansaldo would be submitting a tender on this project. Ansaldo was, in fact, on the bidder's list, but did not tender. The CGE claim, however, was that Ansaldo's low offers at both Upper Salmon and Cat Arm, and the expectation that such low offers would continue, induced CGE to bid unduly low at Nipawin in order to secure the business of which it was badly in need.

A consideration of the injurious effect on CGE of the bidding activities of Ansaldo on the Upper Salmon and Cat Arm projects, taken together, persuaded the Anti-dumping Tribunal that material injury was thereby caused.

The Anti-dumping Tribunal accepted that CGE's aggressive pricing at Nipawin was in large measure motivated by plant loading considerations, but it accepted as well that had it not been for the experience of Ansaldo's pricing at Upper Salmon and Cat Arm, it would have tendered at least at a level which represented full costs. The precise impact of this price suppression on CGE's profitability, given that it obtained all three awards, was undoubtedly a matter of some debate, but the Anti-dumping Tribunal was satisfied that it was significant. The Anti-dumping Tribunal was of the opinion that reduced profitability had, in turn, a ripple effect which affected investment decisions to enhance productivity and impacted on export performance as well.

From an examination of the evidence, it appeared that only one-third of the total megawatts that had been forecast for the years 1980 to 1982 actually materialized. This contraction in the market had served to exacerbate the potential for injury in the past and for the future. The mere presence of a qualified supplier prepared to bid at dumped prices, as Ansaldo had in the past, was a continuing and disruptive factor to long-term planning, was price-suppressive in the tendering process and was a source of continuing and serious harm.

INDUSTRY'S POSITION

Turning to the current review, counsel acting on behalf of GE Canada, MIL Tracy and DBS Escher Wyss pointed to the unique characteristics of the market for turbines and generators. These characteristics include the customized nature of the products, the substantial size of individual awards and their small number, the long timeframe between the time of award and the completion date, and the heavy and continuing capital investment required.

Counsel argued that, as a result of a number of changes which had occurred in the last few years, the industry remained in many aspects as vulnerable as it did when the Anti-dumping Tribunal found injury in its last finding in 1984. The industry has recorded continuing financial losses as a result of depressed market demand over the 1981-85 period, which affected the financial results for the second half of the decade. In an attempt to contain losses, the industry ceased production in certain areas and slashed employment levels. The restructuring measures have resulted in businesses focused exclusively on hydrogeneration.

Counsel acknowledged that forecasts suggested a sizeable increase in domestic orders. However, forecasts typically overstate actual market demand in this industry. Moreover, the major part of planned projects in Canada are likely to be awarded in the first half of the 1990s, giving rise to considerable concern over plant loading in the second half of the decade.

Although the level of domestic demand has recovered from the 1981-85 trough and will continue to be strong for some time to come, some unused capacity has remained, forcing the industry to aggressively pursue export business. Without this export business, counsel argued, industry costs would be considerably higher, affecting the viability of domestic producers. Furthermore, recent alliances between international firms will intensify competition in export markets, making foreign contracts harder to obtain.

Counsel argued that the loss of a single order could have severe financial and employment effects lasting for several years after the date of award. Under the provisions of SIMA, the producers have the legal right to initiate an action based on an agreement to sell or an irrevocable tender on a contract. The industry considers that such a right to initiate proceedings is an inadequate form of protection and noted that the Anti-dumping Tribunal in their statement of reasons in the Italian generator case had found that the mere presence of a qualified supplier prepared to bid at dumped prices was a continuing and disruptive factor.

Counsel further argued that, although a sizeable portion of the anticipated market would be in the province of Quebec, which is closed to offshore bidding, the loss of a single major contract in the open sector would result in serious material injury to the industry. It was also argued that the injury caused by dumping could also have, as it has had in the past, a very serious impact on domestic price levels, even in protected markets, since bids are evaluated on the basis of apparent open market prices.

Other changes which need to be addressed in considering the vulnerability of the industry to resumed dumping include the decreased availability of export financing and the increasing refusal of public utilities to provide public bid information, which has restricted the opportunity to make timely use of trade law remedies.

Counsel argued that the lack of recent participation by suppliers from the subject countries did not suggest that there was no propensity to dump. Rather, counsel submitted that the propensity of offshore suppliers to dump in Canada had to be considered in light of their activities elsewhere in the world. In this regard, it was alleged that suppliers from the subject countries would continue to have excess capacity and had continued to aggressively pursue export markets, quite often with success. The worldwide excess capacity also anticipated over the 1990-2005 period suggests, in the industry's opinion, a strong likelihood of renewed dumping in Canada by foreign suppliers, particularly those from the subject countries.

On the basis of a continued propensity to dump and continued vulnerability of the industry, counsel argued that the four findings relating to the subject turbines and generators should be continued, without amendment.

EXPORTERS'/IMPORTERS' POSITION

Counsel representing JEMA and Fuji argued that the outlook for the next ten years in Canada was exceedingly good, as compared to levels of the past decade, with much of the growth occurring in Quebec.

Counsel further argued that Hydro-Quebec's policy of giving preference to local manufacturers in turbine and generator contracts had provided the domestic industry with a secure base from which it could develop world-scale operations. Furthermore, the Canadian industry has implemented major restructuring and cost-saving measures and has made alliances which have enabled it to compete successfully domestically and abroad. Accordingly, counsel argued that the Canadian industry was not vulnerable to the resumption of dumping of turbines and/or generators.

Counsel argued that there existed no propensity on the part of Fuji and of the other Japanese producers to dump in Canada. Japanese exports of turbines and generators to Canada in the last 10 years have been negligible. Moreover, the dramatic appreciation of the Japanese yen, which began in the latter part of 1985, has forced a shift in the economy's orientation from export demand to domestic demand. This shift also occurred in the heavy electrical industry. To illustrate, witnesses pointed to figures that showed a steady decline since 1980 in the ratio of exports to total sales of heavy electrical equipment for Fuji. Meanwhile, total sales of other heavy electrical equipment have increased steadily due to the increase in domestic sales. According to JEMA, similar trends prevail with the other major Japanese turbine and generator manufacturers. In order to cope with the decline in production of the subject goods, Japanese manufacturers, it is argued, have reduced the production capacity dedicated to turbines and generators by shifting their human resources and manufacturing facilities into the production of other products such as small or micro-electric motors, inverters and uninterrupted power systems. Therefore, there exists no plant loading imperative to capture a certain base load of business at almost any price, as is argued by the Canadian producers.

Counsel for the Japanese manufacturers concluded that, given the current relative strength of the Canadian producers afforded by the buoyant market conditions, the high level of orders on hand and the privileged position of the producers in the closed sector of the market, and in light of the absence of any reasonable evidence of a propensity to dump into Canada on the part of the Japanese, the findings should be rescinded.

Counsel representing BEC, Fox and V/O Energomachexport argued that the assumptions and opinions which prompted the Anti-dumping Tribunal to continue the 1976 finding on Soviet turbines in its 1983 review no longer applied.

Counsel argued that the domestic producers had become much more cost-effective in the manufacture and marketing of their products. Despite the various difficulties which surround market forecasting, one clear conclusion which can be drawn from the evidence on future hydro-electric development is that there will be constant, sizeable growth.

The importance placed on underutilized factory capacity by the domestic producers is misleading because capacity can easily be altered by subcontracting work. It was submitted that, in light of the evidence presented, the Canadian hydrogeneration market and the position of the domestic producers were very positive.

Counsel further pointed to a joint venture known as BEC which had recently been formed, and which would significantly affect the way in which the subject goods would be tendered and distributed in North America. BEC is a California corporation, with majority ownership held by The Bering Company (51 percent), and the balance (49 percent) held by V/O Energomachexport, a Soviet trading company. The Bering Company itself is owned predominantly by American investors, 80 percent of the shares, with Fox, a Canadian-owned company, holding 20 percent of the shares. Counsel argued that this joint venture had no intention of dumping turbines in Canada, in the event of a rescission of the 1976 finding. Discussions have recently taken place with Revenue Canada to ensure that future bids be made at fair pricing levels. Soviet producers could not bid directly on Canadian contracts, since BEC has the exclusive rights to license and distribute Soviet hydrotechnology in North America. Components and prices of turbines (and generators) would be designed, engineered and manufactured not only in the USSR, but also in the United States and Canada; in the latter case, through the participation of Fox, a Canadian-owned company. It was submitted that the organizational structure of BEC is much the same as that of DBS Escher Wyss, and that BEC should, therefore, be treated in the same manner as that Canadian producer.

In light of the foregoing, it was requested that the 1976 finding relating to turbines originating in the USSR be rescinded.

PRELIMINARY ISSUE

During the hearing, counsel for Fuji and JEMA argued that separate hearings should be held for each finding or, at the very least, for each of the two product categories. After some discussion with the parties involved, the Tribunal ruled that the four findings should be combined into a single review hearing but whenever possible, relevant parties should separate their evidence, cross-examination and argument according to the product and country under consideration. The Tribunal noted that the staff report provided separate analysis of the turbine and generator market and bid activities of suppliers from each country in question. This permitted parties to examine the various facts under review individually.

Underlying the Tribunal's ruling was the recognition that the four findings share many common elements. Most notably, the domestic industry is virtually the same for turbines and generators and historical and forecast market demand has and will affect all in a similar fashion.

In its examination of the evidence and formulation of the reasons, the Tribunal proposes to adopt a similar approach to that agreed upon at the hearing, i.e., to first deal with the common elements in this review and then address the specific evidence related to each finding.

MARKET AND FINANCIAL CONSIDERATIONS

Turbines

Market demand for turbines and generators is typically measured in terms of additions to existing hydrogeneration capacity. An examination of capacity additions over the past 20 years, grouped into awards made over 6- or 7-year intervals, suggests a steady decline in market demand from 13,832 MW in the 1969-75 period to 8,771 MW in 1976-82 to 5,270 MW in the most recent 1983-89 period. Measured in this fashion, capacity additions in 1983-89 amounted to only 38 percent of the level of 1969-75. A closer examination of awards made during the 1980s reveals that a serious market trough occurred in 1981-84, but that demand has strengthened since that time. Most of the 5,270 MW of capacity additions recorded for the 1983-89 period occurred after 1984.

There were a number of reasons for the softening of demand for hydrogeneration equipment in the early 1980s. These included lower electrical load growth rates forecast by public utilities, excess reserves brought about by aggressive additions to capacity in the 1960s and 1970s, high capital costs, energy conservation considerations and increasing environmental concerns. This was reflected in low plant loading levels and, in the view of industry witnesses, unsatisfactory financial performance. According to industry participants, financial losses would have been even more severe had Hydro-Quebec not accelerated its program of hydro upgrade and refurbishment of older stations.

Regarding anticipated market demand, a number of forecasts with varying timeframes were filed during the hearing. The domestic industry's forecast predicts that Canadian orders for hydraulic turbines will total some 15,000 MW over the 1990-2000 period, with approximately 9,400 MW occurring over the first half of the decade. The Tribunal's own forecast, based on the most recent information obtained from the public utilities and users of the subject goods, predicts that market demand will total a similar figure (some 9,100 MW) for the 1990-95 period, inclusive. Within that timeframe, there are some minor differences in the timing of the awards found in the two forecasts. For example, Site C, British Columbia, slated for award in 1992 in the industry's forecast, has been delayed once again, and is now listed only as a possibility within the decade. Grande Baleine I and II, Quebec, have been pushed back about one year in the Tribunal's forecast.

It is difficult to trace the effect of turbine and generator awards on the financial performance of Canadian producers because of the long lags between awards, fabrication and delivery. Most producers record sales at the time that the equipment is delivered, although progress payments are usually received during the time of fabrication. Consequently, income statements filed by the three Canadian producers for the 1985 to 1989 period relate to plant activity during that time and sales revenues on any contracts awarded earlier in the decade. Thus, income statements for 1985-89 reflect, in large measure, the depressed market conditions of the 1981-84 period.

Producers' income statements displayed considerable year-to-year fluctuations in sales and in gross margins for both domestic and export business. Consolidated results for the GE Canada hydro group, which encompass both subject and non-subject goods, showed improvements in 1988-89 over previous years. DBS Escher Wyss reported

reduced losses on turbine sales in the past two years. MIL Tracy also reported a smaller loss in total sales of turbines and generators in fiscal 1989, compared to fiscal 1988.

Generators

Due to the fact that new additions to hydro-electric capacity normally consist of power generation groupings made up of turbines and generators, the market for the subject electric generators closely parallels the demand for hydraulic turbines. Accordingly, market demand for generators also experienced a severe depression over the 1981-84 period. This drastic contraction in demand affected the domestic producers' plant loading for the latter half of the 1980s, with negative effects on profitability for the subject hydro-electric generators.

The data filed in response to the Tribunal's questionnaires and confirmed by the evidence filed clearly show that market demand in the second half of the 1980s has recovered from the market trough experienced in the 1981-84 period. Furthermore, the various market forecasts indicate a substantial increase in market demand over the first half of the 1990s in the hydro-electric generator sector, which should approach, on an annual basis, the buoyant conditions of the 1969-75 period used as a reference by the domestic industry. A significant portion of these awards will be awarded in the province of Quebec.

Relatively high levels of plant loading are reported by the domestic producers for most of the period covering 1990 to 1993. The figures, however, do not take into account contracts about to be secured in 1990, nor fairly substantial repair/refurbishing business that will accrue to some of the domestic producers, and which should have a positive effect on plant loading over the first half of the decade.

Specific financial data were filed by the three domestic producers with regard to sales of generators. As was the case with turbines, sales and gross margins for the subject hydrogenerators varied widely between the domestic producers and in regard to domestic and export sales. Few discernible trends emerged from the financial data filed, which covered the 1985-89 period.

REASONS FOR DECISION

In reviewing the four findings before it, the Tribunal must consider two basic questions. The first is whether there is a propensity to dump by the exporters covered by the findings and, second, whether the domestic industry is vulnerable to a resumption of dumping.

The first question of propensity to dump can only be answered by looking at the activities of each exporting country in turn. However, the Tribunal's view is that the second question of industry vulnerability can be addressed in the context of all four findings combined because of the number of common elements involved. We are dealing, by and large, with the same companies in all four findings. Regarding the distinctions between turbines and generators, evidence revealed that awards normally call for the supply of power groupings, encompassing both products. Recent changes in world markets, such as firm alliances and technology exchanges and restructuring measures undertaken by domestic producers, have affected both subject groupings.

Plant loading considerations are also closely linked, given the similarity in production equipment and other factors. The Tribunal further notes that much of the testimony and argument made during the hearing on the issue of industry vulnerability was not specific to turbines or generators.

Vulnerability

In assessing industry vulnerability, the Tribunal considered current and future demand for hydrogeneration equipment and the nature of competition for upcoming contracts within the Canadian market. Although the financial situation of Canadian producers was also examined, the lags between awards, plant activity levels and financial impact made it difficult to base conclusions on financial results over the review period.

It is apparent from the market data filed by the domestic industry and by the Tribunal's staff that domestic demand for hydrogenerating equipment is recovering from its severe trough of 1981-84 and will increase significantly over the next several years. Both forecasts showed that awards in the 1990-95 period will approach, on an annual basis, the buoyant levels of 1969-75 that were cited as a peak by the industry.

The Tribunal gives less weight to forecasts for the 1995-2000 period, given the even greater limitations associated with long-term forecasts. Although industry predictions point to a drop in activity levels later in the decade, orders would still exceed those in the early 1980s by a considerable margin. Furthermore, the possibility of a demand downturn in five years hence does not justify, in the Tribunal's view, continuation of these findings at present.

Regarding market competition, the Tribunal notes that a large portion of upcoming awards will be closed to foreign firms. Hydro-Quebec, which represents the majority of contracts expected during the 1990s, applies a "buy-Quebec" policy that effectively excludes foreign competition. Ontario Hydro practices a restrictive bidding program that limits awards to Canadian producers. Further, in light of Manitoba Hydro's past actions in awarding its Limestone project to CGE, Canadian producers are likely to be similarly favored in Manitoba's upcoming Conawapa project. Taken together, projects for which Canadian producers are likely to receive preferential treatment represent as much as four-fifths of activity forecast for 1990 to 1995. By virtue of the procurement practices of provincial public utilities and the healthy increase in demand for the 1990s, Canadian producers are assured access to a sizeable market for hydrogeneration facilities.

The higher levels of market demand will translate into improved plant loading which should, in turn, lead to improved financial results. The Tribunal also finds that restructuring and efficiency gains achieved since the findings have been in place, although painful for the participants, have made the industry less vulnerable to competition from imports. GE Canada and MIL Tracy have both competed successfully in world markets over the past decade. Technical exchange agreements and alliances have enhanced the competitive ability of domestic firms.

On the basis of a much improved order schedule for the 1990s, continued closed markets for the subject goods, healthy current and anticipated levels of plant loading,

and improved efficiency and cost position of domestic firms, the Tribunal concludes that the Canadian industry is not vulnerable to imports of the dumped products.

Propensity to Dump - Conclusions

Turbine Finding Re: Japan/People's Republic of China (ADT-9-84)

In determining whether there exists a propensity to resume dumping in the domestic market, the Tribunal must base its decision on the facts before it and not merely on allegation, conjecture or remote possibility. In the case of Japanese imports, attention was focused on past activity of Japanese manufacturers in Canada and other export markets, and on industrial conditions in Japan.

The Japanese have not successfully bid on any domestic award since the 1984 finding and have not contributed in any measurable way to any financial difficulties experienced by the industry since that time. Canadian producers have been successful in obtaining awards in foreign markets against world-class competitors, including the Japanese.

Changes in Japan's domestic market conditions and decisions affecting the production of the heavy electrical industry were also taken into account. Of note was evidence indicating that the ratio of total Japanese exports to total sales of heavy electrical equipment has steadily declined since 1980, at the same time as total sales of other heavy electrical equipment were increasing. In order to cope with the decline in production of the subject goods, Japanese manufacturers have made significant reductions in their production capacity dedicated to turbines and generators, by shifting their human resources and manufacturing facilities into the production of other goods. Taken as a whole, the evidence, in our opinion, does not suggest a plant loading imperative to capture a certain base load of business, as was argued by the Canadian producers.

The Tribunal is not persuaded that a rescission in the case of the Japanese would provide them with an opportunity to penetrate the market to any substantial degree. As noted earlier, a significant portion of the anticipated contracts for turbines will be awarded by the provinces of Quebec and Ontario, which either exclude offshore competition from bidding or impose a preferential "buy-Canadian" purchasing policy. Regarding the BC market, the Government in that province appears to be relying more on privately developed, smaller contracts to supply its hydro needs in the next few years, a niche which is not likely to be of interest to the Japanese, given the small value of the individual contracts.

The Tribunal anticipates that, on the remainder of the market available to offshore bidders, the Japanese will be careful not to bid at dumped price levels, knowing that the industry can, under the provisions of SIMA, initiate anti-dumping proceedings on the basis of a dumped tender. The industry's claims that such a remedy is inadequate, given that the loss of a single award in this type of industry can affect plant loading for an extended period, is not without some merit, nor is the argument that dumped tenders have price-suppressive effects. However, to accept these arguments in the current context of a healthy market outlook and high plant loading would be tantamount to extending the finding indefinitely.

In view of the current strength of the domestic industry and other factors relating to vulnerability discussed previously and given the lack of likelihood of renewed dumping on the part of the Japanese suppliers, the Tribunal concludes that the finding relating to hydraulic turbines or original equipment components thereof originating in or exported from Japan, or originating in or exported from the People's Republic of China and introduced into the commerce of Canada by or on behalf of a manufacturer, producer, vendor or exporter in Japan covered in Inquiry No. ADT-9-84, should be rescinded, effective immediately.

Turbine Finding Re: Union of Soviet Socialist Republics (ADT-4-76)

Turning now to the Soviet turbines, evidence revealed that Soviet suppliers have been effectively shut out of the Canadian market since the time of the original finding 14 years ago.

The Tribunal is satisfied that there is small likelihood of dumping of Soviet turbines in Canada. According to the evidence, their participation in Canada would be through BEC, which possesses the distribution rights for Soviet hydrotechnology in North America. It is quite unlikely, in the Tribunal's view, that such a venture would risk incurring a dumping action in the North American market.

As in the case of other imported hydrogeneration equipment, Soviet turbines will be restricted to the small "open" sector of the market. Further, because the new venture lacks a proven track record, BEC will likely be confined to smaller-sized projects in the foreseeable future.

The Tribunal concludes that the finding relating to hydraulic turbines for electric power generation, not including bulb type turbines, originating in the Union of Soviet Socialist Republics in Inquiry No. ADT-4-76, should be rescinded, effective immediately.

Its decision is based on the significant changes in market circumstances since the original finding and the 1983 review, the current healthy state of the domestic industry and the anticipated growth in market demand, the restricted access of Soviet turbines to large hydro-electric projects, whether offering turbines produced entirely in the USSR or in conjunction with components produced in Canada, and the lack of any convincing evidence of material injury likely to flow from a rescission of the finding.

Generator Finding Re: Japan (ADT-11-79)

The Tribunal, in determining whether there exists a likelihood of resumed dumping of the subject generators from Japan, looked at the specific evidence filed in relation to this finding. It noted that the Japanese have not successfully bid on any domestic awards since the 1979 finding, nor has any evidence of low-priced bidding on contracts requiring hydro-electric generators been directed at the Japanese by the domestic producers. The arguments raised by the industry as to the propensity to dump in the Canadian market relate essentially to bid activity in foreign markets by the Japanese, to the plant loading imperative and to the attractiveness of the Canadian market.

Turning to the issue of Japanese bid participation in foreign markets, the Tribunal was not convinced that any firm conclusions could be drawn from the evidence filed. As noted previously, while the industry presented some evidence of comparatively low Japanese pricing on foreign awards, Japanese witnesses countered with contrasting evidence showing that their bids were often at higher price levels than those of the Canadian producers. In light of contradicting evidence, the Tribunal is not convinced that the Japanese have demonstrated a propensity to dump in Canada.

Japanese witnesses, in addressing the issue of plant loading imperative, presented historical data relating to exports, dedicated production capacity and the shifting of human resources to non-subject areas. However, the Tribunal also notes that no Japanese plants have been mothballed and that plant capacities and loading rates can change over time. On balance, in the Tribunal's view, the evidence does not suggest a distinct plant loading imperative on the part of the Japanese to dump in foreign markets such as Canada.

There is no doubt that Canada, with its large market for hydrogeneration equipment, is and will continue to be an attractive market to offshore suppliers. However, as noted earlier, a significant portion of the market in the next few years will be accounted for by Hydro-Quebec, a customer which applies a "buy-Quebec" policy or in provinces where Canadian producers may expect preferential treatment. Furthermore, it is speculative to assume that for the remainder of the market, consisting of BC Hydro as well as smaller contracts throughout Canada, significant business will be taken by Japanese suppliers in the event of a rescission. The public utilities are very much aware of the liabilities attached to awarding a contract to a competitively priced offshore tender and to past importer rulings, which have deemed the public utility to represent the importer of record. Several findings directed against foreign suppliers of dumped goods in the heavy electrical field have been in place for a number of years. In our estimation, the stigma attached to awarding a contract to a foreign-based supplier of dumped goods is likely to be a strong disincentive to source from offshore suppliers for some time. Furthermore, the Tribunal notes that SIMA permits Canadian producers to complain at a relatively early stage (tender or offer to sell) of an award of a contract. While it recognizes that there may be some difficulties in the timely filing of a complaint against an alleged dumped tender, this reason does not constitute sufficient grounds on which to continue a finding in place against a country.

For all these reasons and for reasons outlined previously concerning vulnerability of the domestic industry, the Tribunal concludes that the finding relating to the subject alternating current electric generators and component parts thereof, originating in or exported from Japan, in Inquiry No. ADT-11-79, should be rescinded, effective immediately.

Generator Finding Re: Italy (ADT-8-83)

The evidence presented in regard to propensity to dump by Italian generator producers consisted of selected bidding activity by the Ansaldo companies in foreign markets, as well as information on capacity utilization levels and anticipated demand in the Italian market and information concerning anticipated demand and capacity utilization levels in Italy. However, the Tribunal was unable to conclude that there was propensity to dump because of the limitations and selectivity of the data presented. The

Tribunal did note, however, that Italy had not successfully participated in any bids in Canada since the time of the 1983 finding.

The Tribunal reached a similar conclusion with respect to Italian generators as with the other three findings before it. Given the restrictive nature of the Canadian hydrogeneration market, the strong outlook for domestic demand, the improved position of the Canadian industry, and the lack of any clear evidence regarding propensity to dump, the Tribunal concludes that the finding respecting the subject alternating current electric generators and certain component parts thereof, originating in or exported from Italy in Inquiry No. ADT-8-83 should be rescinded, effective immediately.

Kathleen E. Macmillan
Kathleen E. Macmillan
Presiding member

Robert J. Bertrand, Q.C.
Robert J. Bertrand, Q.C.
Member

W. Roy Hines
W. Roy Hines
Member