CANADIAN INTERNATIONAL TRADE TRIBUNAL
TRIBUNAL CANADIEN DU COMMERCE EXTÉRIEUR

Ottawa, Thursday, June 1, 1989

Appeal No. 2925

IN THE MATTER OF an application heard February 23, 1989, pursuant to section 51.19 of the *Excise Tax Act*, R.S.C. 1970 c. E-13 (the Act) as amended;

AND IN THE MATTER OF a decision of the Minister of National Revenue dated December 14, 1987, with respect to a notice of objection filed pursuant to section 51.17 of the Act.

BETWEEN

LOVELL LIGHTING LTD. Appellant

AND

THE MINISTER OF NATIONAL REVENUE Respondent

DECISION OF THE TRIBUNAL

The appeal is dismissed and the Tribunal declares that the conversion units manufactured by the appellant do not qualify for inclusion as electrical equipment or equipment and hardware designed for permanent installation in a system for the supply of electricity under section 4, Part I, Schedule V of the Act or under paragraph 2(f) of the *Construction Materials Sales Tax Regulations* (C.R.C. c. 587) and are not components for light standards under section 11, Part I, Schedule V of the Act or under paragraph 2(n) of the aforementioned Regulations. The conversion units are not eligible to be taxed at a reduced rate of sales tax.

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

John C. Coleman
John C. Coleman
Member

Arthur B. Trudeau
Arthur B. Trudeau
Member

Robert J. Martin
Robert J. Martin
Secretary

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CANADIAN INTERNATIONAL TRADE TRIBUNAL | TRIBUNAL CANADIEN DU COMMERCE EXTÉRIEUR

UNOFFICIAL SUMMARY

Appeal No. 2925

LOVELL LIGHTING LTD. **Appellant**

and

THE MINISTER OF NATIONAL REVENUE **Respondent**

Excise Tax Act - Sales Tax - Whether conversion units electrically connected to High Pressure Sodium (HPS) lamps can be described either as being "electrical equipment or equipment and hardware designed for permanent installation in a system for the supply of electricity" under section 4, Part I, Schedule V of the Excise Tax Act or under paragraph 2(f) of the Construction Materials Sales Tax Regulations or, in the alternative, as components for light standards under section 11, Part I, Schedule V of the Act or under paragraph 2(n) of the Regulations - Whether eligible to be taxed at a reduced rate of sales tax.

***DECISION**: There is a difference between systems that supply electricity and systems that use electricity. The HPS lamp will not function properly without the conversion unit. The conversion unit modifies, regulates and controls the HPS lamp's use of electrical energy. The conversion unit together with the lamp is part of the system that uses electricity. The conversion unit is not a component for light standards. The conversion unit allows an HPS lamp to be mounted to a pre-existing light standard. The conversion unit is identified with the operation and function of the HPS lamp and not with the light standard. Appeal dismissed.*

Place of Hearing:	*Ottawa, Ontario*
Date of Hearing:	*February 23, 1989*
Date of Decision:	*June 1, 1989*
Panel Members:	*Robert J. Bertrand, Q.C., Presiding Member* *John C. Coleman, Member* *Arthur B. Trudeau, Member*
Counsel for the Tribunal:	*Clifford Sosnow*
Clerk of the Tribunal:	*Janet Rumball*
Appearances:	*G.A. Swanson for the Appellant* *I.M. Donahoe for the Respondent*
***Cases Cited**:*	*Electrical and Electronic Manufacturers Association of Canada v. The Deputy Minister of National Revenue for Customs and Excise, 6 T.B.R. 608 (T.B.).*
***Statutes and Regulations Cited**:*	*Excise Tax Act, R.S.C. 1970 c. E-13 - ss. 27 and 51.19, ss. 4, 11 and 35 of Part I of Schedule V; Canadian International Trade Tribunal Act, S.C. 1988, c. 56 - ss. 54(2) and 60; Construction Materials Sales Tax Regulations, C.R.C., c. 587 - par. 2(f) and 2(n).*
***Dictionaries Cited**:*	*The World Book Dictionary;* *Institute of Electrical and Electronic Engineers Inc. Standard Dictionary of Electrical Terms (1984).*

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CANADIAN INTERNATIONAL TRADE TRIBUNAL
TRIBUNAL CANADIEN DU COMMERCE EXTÉRIEUR

Appeal No. 2925

LOVELL LIGHTING LTD. **Appellant**

and

THE MINISTER OF NATIONAL REVENUE **Respondent**

TRIBUNAL: ROBERT J. BERTRAND, Q.C., Presiding Member
JOHN C. COLEMAN, Member
ARTHUR B. TRUDEAU, Member

REASONS FOR DECISION

SUMMARY

The appellant manufactures conversion units for high pressure sodium lamps used in street lighting as replacement for mercury vapour or incondescent lamps. The units are encased in a box and mounted on a lamp pole (light standard) or placed within or adjacent to the light fixture attached to the pole. The appellant is seeking a decision by the Tribunal that would classify the conversion units as being electrical equipment or equipment and hardware designed for permanent installation in a system for the supply of electricity under section 4, Part I, Schedule V of the *Excise Tax Act*[1] (the Act) or under paragraph 2(f) of the *Construction Materials Sales Tax Regulations*[2] (the Regulations). Alternatively, the appellant is seeking to classify the conversion units as components for light standards under section 11, Part I, Schedule V of the Act or under paragraph 2(n) of the Regulations.

Classification under either of the categories means that the conversion units will be assessed at a reduced rate of sales tax.

The appeal is not allowed. The Tribunal considers that the conversion units are an integral part of the high pressure sodium lamp system and thus of the system that uses rather than supplies electricity. The conversion units are specifically designed to be used with the HPS lamp, and the HPS lamp cannot function without the conversion units.

The Tribunal also considers that the conversion units cannot be classified as components for light standards. The units are identified with the operation and function of the HPS lamp and not with the light standard.

1. R.S.C. 1970, c. E-13; now R.S.C. 1985, c. E-15.

2. C.R.C., c. 587.

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THE LEGISLATION

The relevant statutory provisions at the time this appeal was instituted are as follows:

27. (1)[3] *There shall be imposed, levied and collected a consumption or sales tax at the rate prescribed in subsection (1.1) on the sale price or on the volume sold of all goods*

...

27. (1.1)[4] *Tax imposed by subsection (1) is imposed*

...

(b) in the case of goods enumerated in Schedule V, at the rate of eight per cent;

...

(d) in any other case, at the rate of twelve per cent.

...

SCHEDULE V

PART I

CONSTRUCTION MATERIALS

...

4. Electric conducting and telecommunication wire and cable; transformers, circuit breakers and related electrical equipment designed for permanent installation in a system for the supply of electricity.

...

11. Lumber; plywood; sash; shingles; lath; siding; stairways; walkways; fire escapes; railway ties; light standards, towers and similar construction components; cornice, frieze, pilasters and other such building components, not including assembled or unassembled furniture.

...

3. R.S.C. 1985, c. E-15, ss. 50(1).

4. Ibid., ss. 50(1.1).

35. Such additional articles and materials as are prescribed by regulation of the Governor in Council to be construction materials.

The relevant regulatory provisions at the time this appeal was instituted are:

REGULATIONS RESPECTING THE APPLICATION OF
PART I OF SCHEDULE V TO THE *EXCISE TAX ACT*
TO CONSTRUCTION MATERIALS

1. These Regulations may be cited as the Construction Materials Sales Tax Regulations.

2. The following articles and materials are hereby prescribed for the purposes of Part I of Schedule V to the Excise Tax Act to be construction materials:

...

(f) equipment and hardware, not provided for in section 4 of Part I of Schedule V to the Excise Tax Act, designed for permanent installation in a system for the supply of electricity;

...

(n) light brackets designed for mounting on poles and components for light standards not including light fixtures;

Although the rates set out in paragraphs 27(1.1)(b) and 27(1.1)(d) have changed numerically during the assessment period, the rate difference between the general rate of tax and the reduced rate of tax during this period has remained at (4) four per cent.

The appeal was originally commenced before the Tariff Board. However, under subsection 54(2) and section 60 of the *Canadian International Trade Tribunal Act*,[5] the appeal is taken up and continued by the Canadian International Trade Tribunal (the Tribunal).

THE FACTS

This is an appeal under section 51.19[6] of the Act filed on January 8, 1988, from a Notice of Decision (No. 70216RE) of the Minister of National Revenue (the Minister) dated December 14, 1987, confirming a Notice of Determination (No. WIN 31369) dated April 20, 1987, of federal sales tax in the amount of $94,656.88. The period of assessment is April 1, 1984,

5. S.C. 1988, c. 56.

6. R.S.C. 1985, c. E-15, s. 81.19.

to March 31, 1987. The refund claim was made on March 31, 1987, and was filed with the Department of National Revenue on April 2, 1987.

The appellant, a licensed manufacturer under section 31[7] of the Act, seeks a declaration that conversion units fall within the scope of section 4 or 11 of Part I to Schedule V of the Act or of paragraph 2(f) or 2(n) of the Regulations and thus are eligible for assessment, for the entire assessment period, at a reduced rate of sales tax.

The conversion units are designed to enable high pressure sodium street lamps to be used in replacement of incandescent or mercury vapour street lamps. The HPS lamps will not work if they are connected directly to the electric utility line. The conversion units will function only with the HPS lamps.

Each unit is composed of a "Leakage Reactance Transformer," a "Power Factor Correction Capacitor," a starter assembly, interconnecting wiring and mounting hardware (a fabricated metal plate, mounting straps and brackets to secure the components to the plate).

A conversion unit may either be placed in a "remote mounting box" and affixed to a light standard or, where space permits, within the light fixture that is attached to the light standard. In both methods of installation, the incandescent or mercury vapour lamp will be removed and replaced with a high pressure sodium lamp.

All of the components of the conversion unit are needed to operate the HPS lamps. The transformer reduces the line voltage to the level required by the lamp and is designed to ensure that the lamp does not receive an ever-increasing amount of power as it ages. The capacitor stabilizes and limits the amount of current that flows through the lamp. By performing these functions, the transformer and capacitor maximize the operating life of the lamp. The starter assembly ionizes gases within the lamp, thereby enabling the lamp to begin using electricity.

The appellant's expert witness, Professor William J. Misskey, testified that the electric utility system and the conversion unit constitute a system for the supply of electricity, providing electrical energy in appropriate form for the load. In his opinion, the subject goods constitute "electrical-supply equipment" as that term is defined in the Institute of Electrical and Electronic Engineers Inc. Standard Dictionary of Electrical and Electronic Terms (1984) (IEEE dictionary). (That dictionary defines "electrical-supply equipment" as "equipment that produces, modifies, regulates, controls, or safeguards a supply of electric energy.") The conversion unit regulates, controls and transfers electric energy from the distribution system to the load.

The word "load," as defined in the IEEE dictionary is "A device that receives or consumes power." The appellant's expert gave the opinion that the load is the HPS lamp. Even though the conversion unit consumes some electricity, it is generally accepted that all devices in an electrical supply system do so to some degree. However, the basic purpose of the conversion unit, as with any electrical supply system, is not to receive or consume power, but rather to transfer power from the electric distribution system to the HPS lamp.

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7. Ibid., s. 54.

The respondent's expert, Mr. Arthur I. Etkin, gave the opinion that the IEEE dictionary definition of "load" is not complete. A load uses power. In this regard, the system for the supply of electricity (i.e. power) is the electrical utility system. The system which utilizes the electricity and thus which constitutes the load is the lighting system. It contains the conversion unit and the HPS lamp. The lamp *per se* cannot use the electricity to produce light. In order to get that result, there must be both an HPS lamp and a conversion unit.

The respondent's expert said that it is common ground amongst the various consultants with whom he works in designing electrical supply and lighting systems that the load constitutes the amount of electricity needed to operate a particular item. He gave the opinion that a device is part of the load if its sole function is to operate the load and if the device cannot be used for anything else other than to operate that load. The conversion unit is entirely dedicated to the HPS lamp. It serves the purpose of starting the lamp and controlling and regulating the power going to the lamp. Therefore, the power needed by the conversion unit and the lamp must be taken into account in determining the load.

Finally, Mr. Etkin said that a light standard is a single pole to which one or more lighting units can be mounted. In the opinion of the respondent's expert, the conversion unit is not a component of a light standard. The appellant did not provide any expert testimony on the meaning of "light standard" and whether the conversion unit is a component of a light standard.

ISSUE

The main issue to which this appeal is directed is whether the conversion units can be described either as being electrical equipment or equipment and hardware designed for installation in a system for the supply of electricity under section 4, Part I, Schedule V of the Act or under paragraph 2(f) of the Regulations. The second issue is whether the conversion units are components for light standards either under section 11, Part I, Schedule V of the Act or under paragraph 2(n) of the Regulations.

Should the goods at issue fall within either of the above categories, they will be assessed a reduced rate of sales tax.

Counsel for the appellant argued that a system for the supply of electricity must perform two functions: (1) it must bring the electrical energy to the load; and (2) it must do so in a way that allows the load to consume the energy.

The appellant argued that the electric utility brings energy to the HPS lamp. However, that energy cannot be used by the lamp. Connecting the power line directly to the lamp will not cause the lamp to shine. Only the conversion unit enables the electricity on the utility line to be used by the lamp.

He argued that it is not useful to suggest that the conversion units are part of the load because they consume electricity. All electrical devices consume a certain amount of current electricity. A device is a load if it is not supplying electricity in a usable form and it is designed to consume that electricity. The subject goods were not designed to consume electricity.

Counsel for the appellant referred to the case of *Electrical and Electronic Manufacturers Association of Canada v. The Deputy Minister of National Revenue for Customs and Excise*[8] which decided that devices necessary to operate motors are not part of a system for the supply of electricity within the scope of section 4, Part I, Schedule V of the Act, but rather are part of the load. He argued that the Tariff Board decided that case on the basis that the items included in Schedule V are all goods which are normally incorporated into a building in the course of its construction. Therefore, he added, the case is only applicable to buildings and thus is distinguishable from the present case.

With respect to the issue of whether or not the subject goods are components for light standards within the meaning of section 11, Schedule V, Part I of the Act or of paragraph 2(n) of the Regulations, the appellant's counsel argued that anything that is connected to a light standard, other than the light fixture, is a component of that light standard. As the conversion unit is connected to the light standard, either by being mounted on the pole or by being placed within the light fixture, it is a component of a light standard.

Counsel for the respondent argued that the subject goods do not fall under section 4 or under paragraph 2(f) because the conversion units are not used "in a system for the supply of electricity." Relying on the Electrical and Electronic Manufacturers case (cited above), for the proposition that the above phrase is not intended to include equipment associated with the consumption or use of electricity, the respondent's counsel argued that the goods at issue do not fall within the meaning of this phrase because the equipment is not designed to supply electricity to the load. Rather, the goods are involved with the utilization of electricity.

In response to the appellant's contention that the subject goods are components for light standards, the respondent's counsel argued that only paragraph 2(f) of the Regulations is the appropriate head in which to seek to place the conversion units. He argued that the only evidence before the Tribunal is that the conversion units are not components of light standards. While the units can be mounted on the light standard, they can also be placed within the light fixture.

Relying on The World Book Dictionary (citation unknown) definition of "component" (that which is "a necessary or essential part"), the respondent's counsel argued that, as the conversion unit is essential to the operation of the HPS lamp, it is a component of the light fixture and thus falls within the exclusionary phrase "not including light fixtures" as set out in paragraph 2(n) of the Regulations.

DECISION

The primary question which the Tribunal must address is whether the goods at issue are electrical equipment or equipment and hardware designed for installation in a system for the supply of electricity within the meaning of section 4, Part I, Schedule V of the Act and paragraph 2(f) of the Regulations.

In addressing this question, the Tribunal notes that there is a difference between systems that supply electricity and systems that receive or use that electricity. Thus, the subject goods will

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8. 6 T.B.R. 608.

be excluded from the scope of section 4 and paragraph 2(f) if they fall within the system that uses or receives electricity.

According to the IEEE dictionary, the word "system" has the following meaning:

> *System (1) (general). An integrated whole even though composed of diverse, interacting, specialized structures and subjunctions. Notes: (1) Any system has a number of objectives and the weights placed on them may differ widely from system to system. (2) A system performs a function not possible with any of the individual parts. Complexity of the combination is implied.*

Thus a system is an integrated whole composed of diverse, yet interacting structures that performs a function not possible with any of the individual parts.

The conversion units are an integral part of the HPS lamp and as such, part of the system that uses electrical energy. The HPS lamp will not function without the conversion unit. If the HPS lamp were connected directly to the electric utility line, electricity would be supplied to the lamp, but not in a form that is usable by the lamp. In order for the supply of electricity to be used the HPS lamp must be connected to the conversion unit. It therefore follows that the conversion unit is a necessary and dedicated component for the use of electricity (to generate light) and thus of the system that uses electrical energy. In short, the conversion unit with the HPS lamp is part of an integrated system that generates light.

In addition, the design of the conversion unit and, in particular, the components of the unit indicate that the subject goods and the HPS lamp act in concert to produce light, i.e. are specialized structures of a system that uses electricity. The capacitor, by stabilizing and limiting the amount of current that flows through the HPS lamp, and the transformer, by being designed to ensure that the HPS lamp does not receive an ever-increasing amount of power as it ages, ensure that the lamp will not suffer a shortened operating life. The starter assembly is necessary to ionize the gases in the HPS lamp and to begin to create light.

Thus, rather than being electric-supply equipment, i.e. equipment that modifies, regulates and controls a supply of electrical energy, the Tribunal considers that the conversion unit modifies, regulates and controls the use of that electrical energy (by the HPS lamp) and is thus part of a system which uses electricity.

It is true that electricity enters the conversion unit and exits, still as electricity, to reach the HPS lamp. In that sense, the unit could be said to supply electricity to the lamp. However, the nature and function of the unit and its dedication to the operation of the lamp make it more a part of the system that uses electricity than of the system that supplies electricity. The conversion unit provides electricity in a form only usable by an HPS lamp. While other lamps, such as mercury vapour lamps, could operate directly from the supply of electricity at the pole, the HPS lamp can only operate if it is connected to a conversion unit.

The appellant proposes a second and alternative argument which is that the conversion units should be classified as components of light standards under the phrase "light standards,

towers and similar construction components" as set out in section 11, Part I, Schedule V of the Act. However, the explicit phrase "components for light standards" is contained in paragraph 2(n) of the Regulations. The phrase "light standards, towers and similar construction components" found in section 11 could only include components for light standards if these were not specifically provided for in paragraph 2(n) of the Regulations.

There remains the question of whether the conversion units can be considered "components for light standards" under paragraph 2(n) of the Regulations. The Tribunal notes that the conversion unit is designed to allow an HPS lamp to be mounted to a pre-existing light standard. The conversion unit is identified with the operation and function of the HPS lamp and not with the light standard.

CONCLUSION

Based on the foregoing, the Tribunal considers that the conversion units neither fall under section 4, Part I, Schedule V of the Act or under paragraph 2(f) of the Regulations as electrical equipment or equipment and hardware designed for permanent installation in a system for the supply of electricity nor under section 11, Part I, Schedule V of the Act or under paragraph 2(n) of the Regulations as components for light standards.

The appeal is dismissed.

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

John C. Coleman
John C. Coleman
Member

Arthur B. Trudeau
Arthur B. Trudeau
Member