STATE OF NEW YORK

DIVISION OF TAX APPEALS

In the Matter of the Petition	:	
of	:	
FREDERICK R. AND ANNE M. CLARK	:	DETERMINATION DTA NO. 807929
for Redetermination of a Deficiency or for Refund of Personal Income Tax under Article 22 of the Tax Law for the Years 1986 and 1987.	:	

Petitioners, Frederick R.[1] and Anne M. Clark, 19 Princess Lane, Loudonville, New York 12211, filed a petition for redetermination of a deficiency or for refund of personal income tax under Article 22 of the Tax Law for the years 1986 and 1987.

A hearing was held before Marilyn Mann Faulkner, Administrative Law Judge, at the offices of the Division of Tax Appeals, Riverfront Professional Tower, 500 Federal Street, Troy, New York, on November 28, 1990 at 9:15 A.M., with all briefs to be submitted by April 29, 1991. Petitioners appeared by Hodgson, Russ, Andrews, Woods & Goodyear, Esqs. (Mark S. Klein, Robert L. Lane, Jr., and Robert D. Plattner, Esqs., of counsel). The Division of Taxation appeared by William F. Collins, Esq. (Arnold M. Glass, Esq., of counsel).

ISSUE

Whether a hydroelectric facility is property principally used in the production of goods by manufacturing and/or processing within the meaning of Tax Law § 606(a) to qualify for the investment tax credit.

FINDINGS OF FACT

Petitioners, Frederick R. and Anne M. Clark, were limited partners in Glen Park

[1]Frederick R. Clark died in March 1990. A revised power of attorney was submitted at hearing by the Estate of Frederick R. Clark authorizing representation by Hodgson, Russ, Andrews, Woods & Goodyear.

Associates, a limited partnership that constructed and operates the Glen Park hydroelectric facility located on the Black River in the towns of Palmaila, Watertown and Brownville in Jefferson County, New York.

Initially the project site for the facility was purchased by Niagara Mohawk Power Corporation ("Niagara Mohawk") in July of 1953 and held in its hydropotential inventory until 1981 when it filed an application with the Federal Energy Regulatory Commission ("FERC") to develop the site as a hydroelectric facility. In 1982, Niagara Mohawk received a license from FERC that required the commencement of construction of the facility by November 1984.

In 1983, Niagara Mohawk decided not to develop the project itself but to request bids from private developers. After a prebid meeting in January of 1984, Glen Park Associates ("Glen Park") was formed as a limited partnership with Mercer Companies, Inc. of Albany and the Edgewater Development Company of Syracuse as general partners. It submitted a development proposal to Niagara Mohawk in April of 1984. Through a competitive bid process, Niagara Mohawk selected Glen Park over 12 competitors for the project and entered into an Energy Sales Agreement with Glen Park on August 15, 1984. Glen Park completed construction of the 32.65 megawatt facility which was placed in service in December of 1986.

The successful bid by Glen Park provided that it lease the project site owned by Niagara Mohawk for 40 years, construct the proposed hydroelectric facility by 1986 and sell the electricity generated by the facility to Niagara Mohawk over a 40-year period at pricing terms set forth in the Energy Sales Agreement. Mr. F. Michael Tucker, the senior vice-president, corporate counsel and chief operating officer of Mercer Companies, Inc., testified that Glen Park's bid was the most competitive bid and that Mercer Companies' investment in the project was based on its evaluation that New York State provided, at the time, the best environment for the development of electric facilities such as Glen Park. Specifically, he referred to the passage by the Legislature of section 66-c of the Public Service Law, the declaration to promote alternative energy facilities under Article 3 of the State Energy Policy, and the 6% investment tax credit.

In 1980, the New York Legislature enacted section 66-c of the Public Service Law ("PSL"). Similar to the Public Utility Regulatory Policies Act of 1978 ("PURPA") (Pub L 95-617) enacted by the Federal government on the national level, the purpose of PSL § 66-c was to promote the State energy goals of development of alternative energy production facilities, cogeneration facilities, and hydroelectric facilities in order to reduce the dependence on traditional fossil fuels (Matter of Consolidated Edison Co. v. Public Service Commission, 63 NY2d 424, 483 NYS2d 153, 154-155, appeal dismissed 470 US 1075, 105 S Ct 1831). To foster this development, PURPA and PSL § 66-c required electric utilities to purchase electric power produced by independent power producers, such as Glen Park, that qualified under the law at purchase rates that were just, nondiscriminatory and in furtherance of the public policy underlying the legislation. Both PURPA and PSL § 66-c were enacted in recognition that one of the central problems that hindered the development of alternative energy sources was the traditional electric utilities' reluctance to buy power from such alternative power producers (id. at 154; FERC v. Mississippi, 456 US 742, 749-751).

PURPA required that the purchase rate not exceed the purchasing utilities' avoided costs; that is, the amount it would have cost the utility to generate the same energy it bought from the qualifying facility had that purchase not been made (Matter of Consolidated Edison Co. v. Public Service Commn., supra, at 155, n. 2). However, PSL § 66-c provided a further incentive to energy developers by requiring a minimum purchase price of six cents per kilowatt hour for electricity which at times could exceed a utility's avoided-cost purchase rate inasmuch as the avoided-cost rate varied by utility and over time depending on market conditions (id.). In his testimony, Mr. Tucker estimated that over 273 new hydroelectric facilities were developed by private power producers in New York State as a result of the Federal and State legislation.

In its attempt to be competitive, the Energy Sales Agreement between Niagara Mohawk and Glen Park provided for pricing terms in the early years of the 40-year contract that were below both the PURPA avoided-cost rate and six-cent minimum rate provided under PSL § 66-c. The payment by Niagara Mohawk for electricity was subject to a 5% escalator provision for

the first five years of the contract and then increased to 6%. However, in years 21 through 40, the lease payments made by Glen Park were used to discount the power sales rates thereby, according to Mr. Tucker, providing a significant economic benefit to the rate payers of Niagara Mohawk, while at the same time fostering the State's policy of encouraging alternative energy.

The Energy Sales Agreement was approved by the New York Public Service Commission, as required by law, and contained numerous provisions concerning the payment for and delivery of electricity. The Agreement required that electricity be delivered to a "Delivery Point", defined as the point where Glen Park's new substation structure interconnects with the new 1.12 mile, 115 KV transmission line to be built between the facility and Niagara Mohawk's existing 115 KV transmission line. It also provided that the electricity delivered conform to standards required by Niagara Mohawk's electric system; that is, 115,000 volts, 60 hertz, and that metering facilities be installed to measure the quality of electricity delivered either at the Delivery Point or elsewhere provided that readings be adjusted for losses between the metering location and the Delivery Point.

Glen Park entered into 13 major contracts in connection with the construction of the project. These contracts involved the installation of the turbine/generator equipment, dam construction, intake construction, canal excavation, powerhouse construction and transmission construction. A list and brief summary of each construction contract is contained in petitioners' Exhibit "9", a document entitled "Project Information Package" dated February 18, 1986.

Although the site had been the location of a series of paper mills and power plants since 1840, there were no remaining structures on the site other than remnants of an old dam. The dam was totally rebuilt and involved a new design. The new dam diverts the water from the Black River into a newly-excavated canal that is 5/8ths of a mile long, 40 feet deep and 60 feet wide. At the end of the canal is a 12-story tall reinforced concrete cylindrical powerhouse that is 100 feet in diameter. This structure contains the equipment and machinery, including two generators, that are powered by water to produce electricity. A smaller powerhouse was also constructed at the dam to ensure adequate stream flow in the section of the stream that is

bypassed by the water diversion into the canal. The main powerhouse is a 30-megawatt capacity facility and generates approximately 125 million kilowatt hours per year. The smaller powerhouse is a 3-megawatt facility that generates 10 million kilowatt hours per year. According to a marketing brochure prepared by Mercer Companies (petitioners' Exhibit "8"), Glen Park is the largest privately-owned hydroelectric project in the country, producing power that is the equivalent of 254,000 barrels of oil or 70,000 tons of coal annually.

The total cost of the hydroelectric facility was $36.1 million, of which $10 million constituted labor costs. According to Mr. Tucker's testimony, over one-half of the contractors used in the project were New York contractors and over 70% of the employees who were involved in its construction were New York residents. Mr. Tucker also testified that the total payroll for operating the facility (including administrative tasks performed by employees of Mercer Companies, the general partner that manages Glen Park) was $240,000.00 in 1990.

The partnership claimed an investment tax credit for its investment in Glen Park for the tax years 1986 and 1987. Petitioners, along with other partners of Glen Park, received "K-1" statements that indicated their proportionate share of these credits based on their partnership interest. Petitioners claimed these amounts as an investment tax credit on their personal income tax returns for 1986 and 1987.

A Statement of Personal Income Tax Audit Changes, dated October 31, 1989, was issued to petitioners indicating corrected tax due of $5,569.53, plus interest, for the year 1986 and corrected tax due of $904.16, plus interest, for the year 1987. The statement also contained an explanation for the amount of tax due as follows: "per the attached Advisory Opinion hydroelectric facilities do not qualify for New York investment tax credit."

The Advisory Opinion attached to the Statement of Personal Income Tax Audit Changes was dated April 29, 1988 and responded to a petition by Newport Hydro Associates (TSB-A-88[5]-I). Under facts similar to the present case, the Advisory Opinion determined that the electric energy generated by the hydroelectric power plant was neither a "good" nor "matter" as those terms are used in Tax Law § 606(a)(2).

The Division of Taxation ("Division") issued a Notice of Deficiency, dated December 26, 1989, to petitioners assessing a tax deficiency of $5,569.53, plus interest of $1,212.32, for the year 1986 and a deficiency of $904.16, plus interest of $131.13, for the year 1987. The total amount due was $7,817.14.

By petition dated March 6, 1990, petitioners challenged the tax deficiency alleging that the Division of Taxation erroneously concluded that the machinery and equipment used in the hydroelectric facility did not qualify for the investment tax credit and that the machinery and equipment at issue were principally used in the production of goods (electricity) by manufacturing or processing pursuant to Tax Law § 606(a).

The Division's counsel filed an Answer, dated June 11, 1990, containing three decretal paragraphs as follows:

> "1. Denies each and every allegation in item 6 of the petition, and affirmatively states that the production of electricity is not the production of goods within the meaning of section 606(a) of the Tax Law.
>
> 2. A Notice of Deficiency was issued December 26, 1989 disallowing tentative credit claimed for 1986 and 1987.
>
> 3. Petitioner has the burden of establishing that the disallowance of credit was erroneous."

At the hearing held on November 28, 1990, the Division's counsel stated that the Division's position was that:

> "the production and sale of power does not qualify as the production of goods under section 606(a)(2)(A) of the Tax Law and it is not manufacturing as defined in section 606(a)(2)(B)(i) of the Tax Law.... [i]t also can[not] be said to be processing, assembling, refining or any of the other processes listed in the Tax Law."

Division's counsel also stated that:

> "taxpayer must show that it is not excluded from obtaining the credit by reason of paragraphs 3 and 4 of sub [sic] (a) of section 606...[and that] opposing counsel will have to establish all the facts upon which petitioner relies for his claim for credit" (Transcript, pp. 8-10).

Petitioners' counsel introduced two witnesses at the hearing to testify how the facility in question generates electricity. The first witness, Mr. Charles M. Keating, was hired as a consultant by Glen Park to test and start up the hydroelectric facility. He testified how the

machinery and equipment operated to produce electricity. He stated that the water in the canal enters the intake area of the powerhouse and passes over the blades of the turbine, rotates the turbine and then discharges out of the powerhouse through the tailrace. The rotation of the turbine also mechanically rotates a shaft which is coupled above the turbine which in turn also rotates the generator above the shaft. The generator consists of two main parts -- the rotor and stator.[2] The stator has a circular shape the circumference of which contains laminated iron that is stacked up with slots embedded with copper coils. The rotor is a cylindrical steel

piece that fits into the stator and consists of 52 magnets bolted on the exterior surface. The magnets are made up of laminated pieces of steel stacked vertically around which are wire coils. As the rotor rotates within the stator, the magnetic field passes through the stator generating electricity in the copper coils of the stator that is carried out of the building to the switchyard located behind the powerhouse. The switchyard has a transformer that converts the voltage of the generated electricity to the voltage specified by Niagara Mohawk in accordance with its system voltage and the Energy Sales Agreement.

The second witness introduced by petitioners concerning the generation of electricity was Dr. Charles H. Holbrow, a professor of physics at Colgate University. His testimony concerned the actual physical properties and characteristics of electricity. He testified that as the rotor rotates, it produces a magnetic field that induces electric currents -- the oscillation of electrons -- in the copper coils of the stator. The oscillation of electrons is then conveyed through the transmission wires to the transformer where the voltage is stepped up and the current amplitude is reduced.

He defined an electron as a particle having a definite mass and definite charges. He also defined "matter", as applied in physics, as "those objects or substances which can be isolated at rest and which have mass" (Transcript, p. 94). He noted that electrons can be isolated and

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[2]The main powerhouse in question contains two turbines and generators.

measured at rest and referred to the 1989 Nobel prize winner in physics who trapped a single electron in a container for nine months and measured its properties over that period of time. In describing how the state of the electrons are altered during the operation of the generator, Dr. Holbrow testified that when the stator is at rest the electrons move very quickly back and forth in a random thermal fashion, but that when the generator is engaged the electrons are made to oscillate in a coherent, regular and ordered motion. The speed of the generator controls the frequency of the oscillation to conform to the 60 hertz standard of Niagara Mohawk's system. The transformer also alters the state of the electrons by changing the voltage and amplitude of oscillation.

When asked whether there was any change in the mass during the generator's operation, Dr. Holbrow responded that the electrons "acquire additional energy and minutely increased mass" (Transcript, p. 98). He also noted that electricity can be measured by the rate at which charges flow back and forth in units of amperes.

In his testimony, Dr. Holbrow also differentiated "radiation" from "matter" stating that microwaves, lightwaves and soundwaves, as forms of electromagnetic radiation, are not "matter" because they do not exist at rest, are not localizable nor can they be isolated (Transcript, pp. 95-96, 109). As an example, he noted that soundwaves represent vibrations of air molecules or a regular pattern imposed upon air molecules (Transcript, p. 109). He stated that, unlike electricity, electromagnetic radiation (such as soundwaves) is distributed on surfaces but is not made up of material components in itself. He also testified that, unlike commercial electricity, microwaves do not need a conduit in order to travel but instead travel through empty space.

Dr. Holbrow was also asked by petitioners' counsel to explain the alteration that occurs in molecules by the operation of a snowmaking machine. In response, he testified that the state of the water molecules is changed from a random motion to a less random and more ordered motion to form a crystalline snowflake.

At the hearing, petitioners' counsel also introduced Mr. Christopher D. Turner as a

witness to testify concerning the purchase and sale of electricity in the New York State market, not only between private power producers, such as Glen Park, and the regulated utilities, but also among the regulated utilities themselves. In response to questions posed by petitioners' counsel, Mr. Turner attempted to distinguish the wholesaling of electricity by Glen Park to Niagara Mohawk from the retailing of electricity by regulated public utilities to their customers or end users as follows:

> "Basically what Niagara Mohawk is buying from Glen Park is electricity as a product. Niagara Mohawk is buying bulk power from Glen Park. Niagara Mohawk is selling electricity to its end users to meet the needs that [they] have but it also, of course, provides other services along with the sale of electricity. It provides reliability of service, it is an energy advisory manager, it reads meters, it renders bills, it acts as a full service utility for the client, the end users [or] the retail customers.... Eventually all Niagara Mohawk is buying is electricity from Glen Park so that the service aspects really don't come into play..." (Transcript, p. 120).

Mr. Turner also testified that there is a very active market for the buying and selling of wholesale or bulk electricity. He described the operation of the New York Power Pool which acts as a broker for wholesale or bulk power transactions among its members within New York State and with other power pools in other states. He noted that the New York Power Pool was formed in the mid-1960's in order to provide reliable service throughout the State by facilitating the sale by a utility that has a surplus of electric capacity to another utility that has a shortfall. The formation of the power pool was triggered by the 1965 blackout and its purpose was to prevent such massive blackouts by acting as a clearinghouse and recordkeeper thereby permitting thousands of transactions a day. According to Mr. Turner's testimony, the New York Power Pool is similar to the New York commodity market for the buying and selling of electricity (Transcript, p. 131).

SUMMARY OF THE PARTIES' POSITIONS

The Division argued for the first time in its brief that petitioners failed to introduce evidence to support the computation of the credit; that is:

> "[t]hey did not specify any of the property purchased by Glen Park Associates, to which the credit might be applicable, and did not show how the credit was passed through, so that a determination may be made, as to the availability of the credit, if the generation of electricity is held to be the production of goods for sale" (Division's Brief at 7).

The Division also argued that the legislative history of Tax Law § 606(a) shows that electricity does not qualify as a "good" and that the generation of electricity is not "manufacturing" within the meaning of the statute. The Division claimed that the Appellate Division's decision in Matter of Leisure Vue, Inc. v. Commissioner of Taxation and Finance (___ AD2d ___, 568 NYS2d 175) is determinative of the issue in this case.

In brief, petitioners argued that electricity is a "good" for purposes of the investment tax credit because the uncontroverted testimony and judicial precedents demonstrate that electricity is matter and a product traded in commerce; that the production of electricity constitutes manufacturing and/or processing; and that the underlying legislative intent and the State Economic Development and State Energy Policy are consistent with a determination that hydroelectric facilities qualify for the investment tax credit.

With regard to the Division's claim that petitioners failed to provide evidence to support the computation of the credit, petitioners responded in their reply brief that the only issue prior to and during the hearing was whether the hydroelectric facility qualified for the investment tax credit as a matter of statutory interpretation of Tax Law § 606(a) as enunciated in the Advisory Opinion (Newport Hydro) (see, Findings of Fact "12" and "13"). Petitioners asserted that the Division's claim that the numerical calculations of the credit were at issue is totally inconsistent with the Division's behavior and statements at every step of the controversy prior to the submission of its brief.

CONCLUSIONS OF LAW

A. Tax Law § 606(a)(2)(A) provides, in pertinent part, that:

> "A credit shall be allowed under this subsection with respect to tangible personal property and other tangible property, including buildings and structural components of buildings, which...have a situs in this state and are (i) principally used by the taxpayer in the production of goods by manufacturing, processing, assembling, refining, mining, extracting, farming, agriculture, horticulture, floriculture..." (emphasis added).

Tax Law § 606(a)(2)(B)(i) defines manufacturing as follows:

> "the process of working raw materials into wares suitable for use or which gives new shapes, new quality or new combinations to matter which already has gone through some artificial process by the use of machinery, tools, appliances or other

similar equipment..." (emphasis added).

Inasmuch as the issue in this case is whether the Division's interpretation of the words "goods", "manufacturing" and "processing" contained in Tax Law § 606(a) is reasonable, petitioners have the burden of showing that the deficiency was improper by demonstrating that its interpretation of the statute is the only reasonable construction (Tax Law § 1089[e]; Matter of Leisure Vue, Inc. v. Commissioner of Taxation and Finance, ___ AD2d ___, 568 NYS2d 175, 176, citing Matter of General Mills Rest. Group v. Chu, 125 AD2d 762, 763, 509 NYS2d 184). As noted in Leisure Vue, the terms "goods" under section 606(a)(2)(A) and "matter" contained in the definition of manufacturing under section 606(a)(2)(B)(i):

> "are not defined in the statute, interpretive case law or the implementing regulations, and the proclaimed legislative intent of the statute, to stimulate revitalization of production facilities within the State, provides little interpretative guidance.
>
> In these circumstances, the ordinary, everyday meaning of these terms is to be applied" (id. [citations omitted]).[3]

B. Petitioners argue that, as used in its ordinary commercial context, the term "good" is generally synonymous with "merchandise" and "commodity" and that each term, as defined, refers to personal property of a tangible nature that is capable of being owned, bought and sold. They contend that both the uncontroverted testimony and judicial precedents establish that electricity is both matter and a product traded in commerce. The Division responds that the cases cited by petitioners describing electricity as a product, commodity or tangible personal property involve situations that are not analogous to the present one and that, instead, Matter of Leisure Vue, Inc. (supra) is controlling because electromagnetic waves and electricity are similar to each other. The Division also argues that although "electricity has a mass, can be felt, smelled and seen, it is not tangible personal property or goods within Section 606(a)(2) of the

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[3] Although Leisure Vue involves the interpretation of Tax Law § 210(12)(b), this statute contains the same language as section 606(a). Section 210(12)(b) permits an investment tax credit against corporation franchise tax, whereas section 606(a) permits an investment tax credit against personal income tax.

tax law" (Division's Brief at 13-14). The Division also comments that the fact that electricity can be "marketed, traded or sold" is not determinative because stocks and bonds, broadcast time, and protective services can also be marketed, traded or sold and still not be "goods".

According to Black's Law Dictionary, Fifth Edition, the term "goods" is defined as follows:

> "A term of variable content and meaning. It may include every species of personal property or it may be given a very restricted meaning.
>
> Items of merchandise, supplies, raw materials, or finished goods....
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> All things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities and things in action.... All things treated as movable for the purpose of a contract of storage or transportation...."

Webster's Third New International Dictionary (1981) defines "goods" as:

> "tangible movable personal property having intrinsic value, usu[ally] excluding money and other choses in action but sometimes including all personal property and occas[ionally] including vessels and even industrial crops or emblements, buildings or other things affixed to real estate but agreed to be severed: chattels, wares, merchandise, food products, chemical compounds and agricultural products."

Relying on these definitions, the Division concludes that "[t]hese definitions of goods, although quite expansive, do not contemplate inclusion of electricity" (Division's Brief at 13). However, the fact that electricity is not specifically mentioned in the definition of "goods" does not necessarily exclude it from the category of a "good".

Contrary to the Division's assertion, Matter of Leisure Vue v. Commissioner (supra), while instructive, is not determinative of this case. In Leisure Vue, the taxpayer, who provided paid television service, claimed an investment tax credit with regard to equipment that "down-converted" or reduced electromagnetic wave signals emitted by transmission companies to widths compatible with its customers' televisions. The court held that the credit did not apply to the taxpayer's equipment because it "simply narrows the width of intangible electromagnetic signals" (id. at 176 [emphasis added]). Here, there is ample testimony distinguishing electromagnetic waves from electricity. Unlike electromagnetic waves, electricity in itself is

matter, is tangible and requires a conduit for its transmission from one point to another (see, Finding of Fact "20").

Moreover, unlike electricity, electromagnetic waves are not in themselves the commodity bought and sold; rather, the product or service paid for in Leisure Vue was the television programming -- the electromagnetic waves being the means for transmitting that programming from one point to another. Thus, as determined in Leisure Vue, the reduced electromagnetic waves are not "goods" as that term is defined -- "tangible movable personal property having intrinsic value". In contrast, electricity does have intrinsic value that is marketed.[4]

While the Division's counsel is correct in noting that the cases cited by petitioners involve statutes or situations unlike the statute in question, those cases nonetheless are relevant to whether the ordinary, everyday meaning of the term "goods" is to be applied to electricity. In Utah Power and Light Co. v. Pfost (286 US 165), the issue was whether the generation of electrical energy, like manufacturing and production generally, was a process essentially local in character and complete in itself or was it inseparable from the transmission of that electricity across state lines so as to make both the generation and transmission subject to the commerce clause of the Constitution. In making its determination, the United States Supreme Court noted:

> "From the strictly scientific point of view, the subject is highly technical; but in considering the case, we must not lose sight of the fact that taxation is a practical matter, and that what constitutes commerce, manufacture, or production is to be determined upon practical considerations" (id. at 179 [emphasis added]).

The Court concluded that the generation of electricity by a hydroelectric facility and its transmission involved two separate events similar "to the manufacture of physical articles of trade and their subsequent shipment and transportation in commerce" (id. at 180). In reaching this conclusion, the Court discussed the physical and practical qualities of electricity as follows:

> "The process by which the mechanical energy of falling water is converted into

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[4]The Division's contention that the fact that electricity can be marketed is not determinative because stocks and bonds can also be marketed and are not considered "goods" misses the point because stocks and bonds have no intrinsic value; like money and any other negotiable instrument, they merely represent value but have no intrinsic practical use or value in themselves.

> electrical energy, despite its hidden character, is no less real than the conversion of wheat into flour at the mill.
>
> The apparent difficulty in perceiving the analogy arises principally from the fact that electrical energy is not substance; at least in common meaning. It cannot be bought and sold as so many ounces or pounds, or so many quarts or gallons. It has neither length, breadth, nor thickness. But that it has actual content of some kind is clear, since it is susceptible of mechanical measurement with the necessary certainty to permit quantitative units to be fixed for purposes of barter, sale, and exchange. However lacking it may be in body or substance, electrical energy, nevertheless, possesses many of the ordinary tokens of materiality. It is subject to known laws; manifests definite and predictable characteristics; may be transmitted from the place of production to the point of use and there made to serve many of the practical needs of life" (id. at 180 [emphasis added]).

Thus, while there is an illusive quality about the nature of electricity, inasmuch as it is not perceived by the senses in the same manner as other goods[5] that are traded in commerce, it nonetheless

has been treated as a commercial good for all practical purposes (see, FERC v. Mississippi, 456 US 742 [upholding the Public Utilities Regulatory Policies Act of 1978 against the claim that the regulated activities do not have an effect on interstate commerce]; Hetherington v. Camp Bird Co., 70 Colo 531, 532 [court stated that it "is well settled that electricity made by artificial means is a product of manufacture, and is personal property"]; State Tax Commn. v. Marcus J. Lawrence Memorial Hospital, 108 Ariz 198, 495 P2d 129 [court found that electricity, gas and water are tangible personal property for purposes of tax exempt status]).

Given the fact that it is a valuable and regularly traded commodity in both the intrastate and interstate market, there is no reason why electricity is not a "good" within the meaning of Tax Law § 606(a). Certainly the ordinary, everyday meaning of the term "good" encompasses

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[5]During the hearing, Dr. Holbrow and the Division's counsel had the following colloquy:

> "Q. (Mr. Glass) ...would you say that electricity is tangible personal property in the same way that your glass is, or that the wood table is?
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> A. (Dr. Holbrow) There are many situations in which electricity can be felt in the sense of tangibility, being able to feel something. Put your finger in the wall socket and you have a very profound sense of its tangibility."

the everyday practices of the marketplace especially in light of the legislative purpose for the investment tax credit -- to "encourage the modernization of antiquated production facilities and make New York a more attractive location for manufacturers...[and to] improve New York's competitive posture and economic climate" (1969 McKinney's Session Laws of NY at 2576). The construction of this hydroelectric facility to produce electricity which is then placed in the stream of

commerce at a competitive price in New York State provides the requisite economic benefit that was envisioned by Tax Law § 606(a) (see also, Findings of Fact "5" and "6"). Thus, I conclude that electricity is a "good" within the meaning of section 606(a).[6]

C. The Division argues that the Legislature's omission of the word "generating" from section 606(a), which instead contains the words "manufacturing" or "processing", indicates that electricity was not contemplated as a "good". Referring to Tax Law § 1115(a)(12) and (c), the Division's counsel notes that the Legislature specifically exempted from sales tax, machinery and equipment used in the production of "electricity" by "generating" and, therefore, the absence of such words in section 606(a) reveals that the Legislature did not intend electricity to be a "good" subject to the investment tax credit. The Division further notes that the legislative

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[6]It should be noted that in United States v. Consolidated Edison Co. of New York (590 F Supp 266), the court rejected a claim for interest on an overcharge bill as time barred stating that:

> "[i]n New York, electricity is not considered 'goods' and the U.C.C. therefore is not directly applicable to contracts involving the provision of electricity."

However, that statement is not persuasive in the present context inasmuch as the Con Ed court only relied on Farina v. Niagara Mohawk (81 AD2d 700, 438 NYS2d 645) in support of this proposition wherein the Appellate Division in dicta stated, with regard to a breach of warranty claim, that "we are unable to conclude that it was intended that electricity be included within the definition of goods (UCC § 2-105)". Not only was the breach of warranty claim in Farina actually decided on another ground (there was no sale to form the basis for the claim), the statement itself is equivocal and does not lead to the conclusion reached by the court in United States v. Consolidated Edison Co. of N.Y.. Moreover, the causes of action in Farina were for strict liability in tort and breach of warranty.

history of the investment tax credit also indicated that one of the sources of the bill was a background study by the New York State Tax

Structure Studies Committee. The Division attached copies of charts and exhibits of this study to its brief which showed the various existing industries and corporations considered in the study for estimating the effect of the tax incentive. Noting that the generation of electricity was not listed for the purposes of the study, the Division argues that the credit was not intended to cover property used to generate electricity.

The Division's legislative arguments are not persuasive. First, the study upon which the Division relies only examined industries from 1962 through 1967. As noted supra, the environment for the development of facilities such as Glen Park was the direct result of the enactment of PURPA in 1978 and PSL § 66-c in 1980 (see, Findings of Fact "4" and "5").[7] There is nothing in the legislative history to indicate that the investment tax credit was limited only to the types of industries existing in the 1960's. As noted by petitioners, since its passage, the investment tax credit has been made available to many businesses producing goods that were not listed on the charts and exhibits of the study (see, Matter of Hal and Julie Mitnick, Tax Appeals Tribunal, January 25, 1991 [x-rays processing equipment]; Matter of Plattekill Mountain Ski Center, Inc., State Tax Commn., March 9, 1985 [TSB-H-85(28)C], [snowmaking equipment]; Enzo Biochem, Inc., Advisory Opinion,

September 10, 1986 [TSB-A-86(19)C], [production of diagnostic kits for human infectious disease]).

Secondly, the fact that Tax Law § 1115(12) specifically refers to "generating" with regard

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[7]Prior to this time, electricity was produced primarily by regulated utilities taxed under Article 9 of the Tax Law and, thus, these utilities were not entitled to the investment tax credit provisions contained in Articles 9-A and 22. As noted supra, facilities such as Glen Park are not regulated utilities providing service to end users, but instead sell this electricity as a wholesale product to the utilities.

to the sales tax exemption does not indicate that electricity is not a "good" that is "manufactured" or "processed" within the meaning of Tax Law § 606(a). Indeed, Tax Law § 1101(b)(6) defines tangible personal property under Article 28 as follows:

> "Corporeal personal property of any nature. However, except for purposes of the tax imposed by subdivision (b) of section eleven hundred five, such term shall not include gas, electricity, refrigeration and steam."

Thus, by implication, Article 28 recognizes that electricity is tangible personal property.

D. The next question is whether the hydroelectric facility at Glen Park was used to produce electricity by "manufacturing" or "processing" within the meaning of Tax Law § 606(a). Section 606(a)(2)(B)(i) defines manufacturing as:

> "the process of working raw materials into wares suitable for use or which gives new shapes, new quality or new combinations to matter which already has gone through some artificial process by the use of machinery, tools, appliances or other similar equipment."

The Division argues that the production of electricity does not fit the definition of manufacturing because it does not involve raw materials, wares or a "process of working one into the other".

The scientific testimony and case law clearly support the conclusion that electricity is "manufactured" or "processed" within the meaning of Tax Law § 606(a). Dr. Holbrow testified that during the operation of the generator the state of electrons in the copper coils is altered from electrons that move in a random fashion to electrons that oscillate in a coherent, regular and ordered fashion. According to his testimony, electrons are particles or "matter" because they can be isolated at rest and have mass (see, Finding of Fact "19"). From these scientific explanations it is clear that the generator transforms randomly-moving electrons (raw material) into electricity (a commercial ware). The transformer also gives new quality to these oscillating electrons by altering their voltage and amplitude in order to conform to the specifications of Niagara Mohawk's system.

Moreover, the case law cited by petitioners is instructive because it reflects the ordinary, everyday usage of the term manufacturing as it applies to the production of electricity. In People ex rel Brush Elec. Illuminating Co. v. Wemple (129 NY 543, 29 NE 808), the New York

Court of Appeals determined that electric light and power companies were entitled to a statutory tax exemption as "manufacturing" companies until the Legislature specifically excluded electric and power companies when it amended the statute. In making its determination, the New York Court of Appeals stated:

> "The true inquiry would seem to be whether a corporation, organized as this is, and carrying on the business that it does, and in the manner shown, would not be considered, in common language, as engaged in some manufacturing process, or carrying on some manufacturing business, though granting all that is said by experts and others about electricity as a natural element or force.... But the electricity or electric currents that produce this result cannot properly be said to be the free gift of nature, gathered from the air or the clouds. It is the product of capital and labor, and in this respect cannot be distinguished from ordinary manufacturing operations. According to the common understanding, the electricity or thing which produces the results from which the corporation derives its income is generated or produced by the application of power to machinery, and thus, by means of a process wholly artificial, the relator is enabled to sell the product of its operations to its customers" (id. at 810 [emphasis added]).

In Louisville v. Howard (306 Ky 687, 208 SW2d 522), the issue was whether transformers were items of "machinery used in manufacturing" so as to qualify for a city tax exemption. In that case, the court categorically stated that the generation of electricity was manufacturing and that the transformers also qualified as "machinery used in manufacturing" because they were "necessary to change generated electricity from a sort of an uncivilized force, unfit to enter a home or place of business, into a subdued servant which may, through 'transformer training', become practically suitable for a common use" (id. at 695).

Also instructive on the issue of what constitutes manufacturing is the State Tax Commission's decision in Matter of Plattekill Mountain Ski Center, Inc. (supra). Citing People v. Knickerbocker Ice Co. (99 NY 181 [1895], 1 NE 669), the Commission concluded that the production of snow by snowmaking equipment constituted manufacturing for purposes of the investment tax credit. In Knickerbocker, the court distinguished equipment which extracted ice in its existing natural state versus equipment which produced ice by artificial means. In determining whether a business was tax exempt as a manufacturing corporation, the court noted that the words of exemption should be taken in their usual and ordinary sense and that "manufacturing":

> "require[s] the production of some article, thing, or object by skill or labor out of raw material, or from matter which has already been subjected to artificial forces, or to which something has been added to change its natural course" (id. at 670 [emphasis added]).[8]

Given this case law and Dr. Holbrow's testimony, which compared the alterations that occur to water molecules in the formation of snowflakes with the alterations that occur to electrons in the production of

electricity (see, Finding of Fact "21"), the only reasonable interpretation of the words contained in the definition of manufacturing under Tax Law § 606(a)(2)(B)(i) leads to the conclusion that electricity was manufactured by the facility in question.

E. Furthermore, notwithstanding Conclusion of Law "D", the property in question would also qualify under Tax Law § 606(a)(2) as property used in the production of goods by "processing" (see, Matter of Niagara Frontier Service, Inc., Tax Appeals Tribunal, August 9, 1990; Matter of Nesbitt, Tax Appeals Tribunal, October 4, 1989). The Division argues that reliance on Matter of Niagara Frontier Services, Inc. (supra), Matter of Nesbitt (supra), and Matter of Plattekill Mountain Ski Center, Inc. (supra) is misplaced because those cases either deal with the processing of fruit or the change in the form of water and that food and water are obviously classified as "goods", whereas "electricity is not" (Division's Brief at 19). However, inasmuch as I have already concluded that electricity is a "good", these cases are relevant to a determination as to what constitutes "manufacturing" or "processing" within the meaning of the statute and the Division has provided no argument to the contrary.

The Tribunal held that the equipment in question in both Nesbitt and Niagara Frontier qualified as equipment involved in the production of goods by "processing". In Niagara Frontier, the room in which bananas were ripened effected significant physical changes in the nature and form of the bananas, thereby transforming them from inedible fruits to edible and

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[8] It should be noted that the court's definition of the term "manufacturing" closely parallels the definition of manufacturing contained in Tax Law § 606(a)(2)(B)(i).

saleable bananas. Similarly, in Nesbitt, the controlled room in which apples were placed slowed down the respiration of the apples and, hence, the natural rotting process thereby extending the marketing season of the apples. Here, the equipment in question also effected a significant "change in the nature, shape or form" of the electrons to produce commercially marketed electricity (see, 20 NYCRR 531.2[e]; Findings of Fact "19" and "21").

F. The Division's counsel argued for the first time in brief that petitioners failed to introduce evidence to support the computation of the credit. However, the only explanation initially offered to petitioners for the corrected tax due in the "Statement of Personal Income Tax Audit Changes" was that electricity was not a "good" or "matter" within the meaning of Tax Law § 606(a) (see, Findings of Fact "12" and "13"). Therefore, in protesting the Notice of Deficiency, petitioners alleged that the Commissioner erroneously concluded that the machinery and equipment at issue did not qualify for the investment tax credit. The Division's answer in response to the petition denied the allegations in the petition and restated the ground for the initial tax deficiency by asserting that "the production of electricity is not the production of goods within the meaning of section 606(a) of the Tax Law" (see, Finding of Fact "16").

From these facts, I conclude that the only ground raised by the Division's notice and pleadings for the assessment of a tax deficiency was the legal argument that the production of electricity did not qualify as the production of goods by manufacturing within the meaning of Tax Law § 606(a). The Division's claim that petitioners failed to support the computation of the credit constitutes a separate, alternative ground for the assessment of the deficiency that is factual in nature and, therefore, should have been asserted by the Division initially in the notice or affirmatively pled in its answer. Absent the assertion of the computational issue as an alternative ground for the Division's action, petitioners were not put on notice prior to the hearing that the computation of the credit was an issue concerning which petitioners had the burden of proof.

The Division's counsel argues that petitioners were on notice that the computation of the credit was an issue by his opening statement at the hearing on November 28, 1990 (see, Finding

of Fact "17"). However, counsel's reference to Tax Law § 606(a)(3) and (4) was not sufficient to alert opposing counsel that the computation of the credit was in question. In the interest of fairness, the Division should have moved to amend its answer during the hearing to assert a second ground for the Division's action that was under protest (see, Matter of Ilter Sener d/b/a Jimmy's Gas Station, Tax Appeals Tribunal, May 5, 1988).

The regulations provide that the administrative law judge "may permit pleadings to be amended before the hearing is concluded to conform them to the evidence, upon such terms as may be just, including the granting of continuances" (20 NYCRR 3000.4[c]). Absent a motion to amend the pleadings during the hearing, wherein a continuance could have been granted, petitioners were not fairly apprised that they were required to introduce evidence in support of the computation of the credit (see, Matter of Anton's Car Care Center, Ltd., Tax Appeals Tribunal, November 23, 1988; see also, Loomis v. Civetta Corinno Const. Corp., 54 NY2d 18, 444 NYS2d 571, 573, rearg denied 55 NY2d 801, 447 NYS2d 436). Therefore, the Division's argument on this issue is rejected.

G. The petition of Frederick R. and Anne M. Clark is granted and the Notice of Deficiency dated December 26, 1989 is cancelled.

DATED: Troy, New York

ADMINISTRATIVE LAW JUDGE