

STATE OF NEW YORK  
TAX APPEALS TRIBUNAL

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

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The Division of Taxation filed an exception to the determination of the Administrative Law Judge issued on August 1, 1991 with respect to the petition of Frederick R.<sup>1</sup> and Anne M. Clark, 19 Princess Lane, Loudonville, New York 12211, 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 appeared by Hodgson, Russ, Andrews, Woods & Goodyear, Esqs. (Mark S. Klein, Robert L. Lane, Jr., Paul R. Comeau, and Robert D. Plattner, Esqs., of counsel). The Division of Taxation appeared by William F. Collins, Esq. (Arnold M. Glass, Esq., of counsel).

The Division of Taxation filed a brief in support of its exception. Petitioners filed a brief in reply. Oral argument, at the request of the Division of Taxation, was heard on March 12, 1992.

After reviewing the entire record in this matter, the Tax Appeals Tribunal renders the following decision.

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<sup>1</sup>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, Esqs.

***ISSUES***

I. Whether a hydroelectric facility qualifies for the investment tax credit in Tax Law § 606(a) as property principally used in the production of goods by manufacturing and/or processing.

II. Whether petitioners were required to introduce evidence to support their computation of the credit.

***FINDINGS OF FACT***

We find the facts as determined by the Administrative Law Judge except for findings of fact "17" and "20" which have been modified. The Administrative Law Judge's findings of fact and the modified findings of fact are set forth below.

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

We modify the Administrative Law Judge's finding of fact "17" as follows:

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

"[t]he 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:

"[n]ow, the taxpayer must show that they are entitled to the credit under the standards set forth in the Tax Law. The 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. This is not actually a case of first impression, though a case where the same issue involving a corporation rather than a partnership has been briefed and is presently before another administrative law judge . . . [and that] opposing counsel will have to establish all the facts upon which petitioner relies for his claim for credit" (Hearing Transcript, pp. 8-10).<sup>2</sup>

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

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The second paragraph of the Administrative Law Judge's finding of fact "17" has been modified to add additional testimony from the record.

stator.<sup>3</sup> 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 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

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<sup>3</sup>The main powerhouse in question contains two turbines and generators.

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.

We modify the Administrative Law Judge's finding of fact "20" to read as follows:

In his testimony, Dr. Holbrow also differentiated "radiation" from "matter" stating that forms of electromagnetic radiation (like microwaves), or other forms of radiation (like lightwaves or soundwaves), are not "matter" because "they do not exist at rest," cannot be localized and cannot be isolated (Hearing Transcript, pp. 95-96, 109). He also testified that, unlike commercial electricity, microwaves do not need a conduit in order to travel but instead travel through empty space.<sup>4</sup>

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

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The Administrative Law Judge's finding of fact "20" originally read as follows:

"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."

We modified finding of fact "20" to more accurately reflect the relevant testimony.

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).

**OPINION**

The Administrative Law Judge concluded that: 1) petitioners have the burden of demonstrating that their interpretation of the statute is the only reasonable construction; 2) electricity is a "good" within the meaning of Tax Law § 606(a)(2)(A); 3) the only reasonable interpretation of the words contained in the definition of manufacturing under Tax Law § 606(a)(2)(B)(i) is that electricity was manufactured by the facility in question; 4) the facility in question qualifies under Tax Law § 606(a)(2)(A) as property used in the production of goods by "processing"; 5) the only ground raised for the assessment of the tax deficiency by the Division's notice and pleadings 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); and 6) absent a motion by the Division to amend the pleadings during the hearing, petitioners were not fairly apprised that they were required to introduce evidence in support of their computation of the credit.

The Administrative Law Judge granted petitioners' petition and cancelled the notice of deficiency dated December 26, 1989.

On exception, the Division asserts that: 1) petitioners have not met their burden of proving that they are entitled to the investment tax credit; 2) electricity is (a) not within the ordinary meaning of the term "goods" contained in Tax Law § 606(a) and, (b) cannot be considered a "good" as electricity results from the oscillation of electrons and is not matter itself; 3) by omitting the word "generating" from Tax Law § 606(a), it was the Legislature's intention to indicate that the generation of electricity was not a process that gives rise to the investment tax credit; 4) the scientific testimony is irrelevant to determining whether electricity is manufactured or processed within the meaning of § 606(a); 5) 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" (Division's brief, p. 19); 6) petitioners have not established what property was purchased for which the investment credit was taken; and 7) petitioners were sufficiently notified that they had the burden of proving each element of

entitlement to the credit by (a) their receipt of the Division's answer, specifically paragraph 3, and (b) the Division's statement at the hearing before the Administrative Law Judge that "the taxpayers must show that they are entitled to the credit under the standards set forth in the Tax Law" (Hearing Transcript, p. 8).

In response to the Division's exception, petitioners assert that: 1) the determination of the Administrative Law Judge correctly concluded: (a) that electricity is a good; (b) that the production of electricity qualifies as both "manufacturing" and "processing"; and (c) that petitioners were entitled to the investment tax credit; 2) State economic, energy, and tax policies, as well as the intent of the Legislature, uniformly support the determination that hydroelectric facilities qualify for the investment tax credit; and 3) petitioners have met their burden of proving their claim.

We uphold the determination of the Administrative Law Judge.

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 are: depreciable pursuant to section one hundred sixty-seven of the internal revenue code, have a useful life of four years or more, are acquired by purchase as defined in section one hundred seventy-nine (d) of the internal revenue code, 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, viticulture or commercial fishing . . ." (emphasis added).

Tax Law § 606(a)(2)(B)(i) defines manufacturing for purposes of the credit as follows:

"[m]anufacturing shall mean 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 and other similar equipment."

The legislative history of this section reveals that the origin of the credit was a 1963 enactment, the purpose of which was: "[t]o accelerate the rate of economic growth in the State and the creation of new and improved job opportunities through special tax incentives for capital expenditures made in the State after December 31, 1963" (Memorandum in Support, L 1963, ch 446). As Governor Rockefeller stated in his annual message to the Legislature in

January of 1963, the tax incentive was recommended "to further attract new industries and to stimulate increased expansion and modernization of existing ones" (Public Papers of Governor Nelson A. Rockefeller, 1963, p. 20, emphasis added). This legislation allowed taxpayers to deduct, for New York corporate franchise, unincorporated business and personal income tax purposes, twice the amount of their Federal depreciation on new plants, machinery or equipment (L 1963, ch 446). Amendments in 1968 limited the accelerated depreciation option to assets used for research and development, air and water pollution control, and property constructed, reconstructed or acquired after December 31, 1967 to be used principally in the production of goods by the taxpayer (Letter to Governor Nelson A. Rockefeller from Joseph H. Murphy, Commissioner of the Dept. of Taxation & Fin., May 14, 1968, Bill Jacket, L 1968, ch 873).

In 1969, another legislative change replaced the double depreciation provisions with the current statutory scheme, a one percent investment tax credit (L 1969, ch 1072). The statutory language governing eligibility was essentially identical to the 1968 statute, so that the credit was available to all taxpayers previously eligible for double depreciation (1969 NY Legis Ann, at 448). The credit mechanism was viewed as a simpler method for obtaining the tax benefit and, therefore, as more directly related to investment in production activities in New York (Letter to Governor Nelson A. Rockefeller from Joseph H. Murphy, Commissioner of Dept. of Taxation & Fin., May 13, 1969, Bill Jacket, L 1969, ch 1072). The legislative history clearly indicates that the purpose of these tax incentives was to foster economic growth and job opportunities through the construction, expansion and modernization of business facilities in the State (see generally, legislative bill jackets to L 1963, ch 446; L 1968, ch 873; and L 1969, ch 1072).

As hydroelectric facilities or other facilities for the production of electricity are not specifically mentioned in Tax Law § 606(a)(2)(A) or its legislative history, we must ascertain whether the language of the statute includes these facilities. We must, therefore, determine if the hydroelectric facility produces "goods" by "manufacturing" or "processing." The term

"goods" and "processing" are not defined in the statute. The statute provides us with a definition of "manufacturing" (Tax Law § 606[a][2][B][i]); however, we must decide if this definition applies to these facts.

The first question to be addressed is whether the electricity generated by the hydroelectric facility can be considered a "good" for purposes of the credit.

Since the term "goods" is not defined in Tax Law § 606, "the ordinary, everyday meaning of the [term] is to be applied" (Matter of Leisure Vue v. Commissioner of Taxation & Fin., 172 AD2d 872, 568 NYS2d 175, 176; McKinney's Cons Laws of NY, Book 1, Statutes § 232). Applying this standard, "goods" in the ordinary commercial context refers to tangible personal property having intrinsic value that is capable of being owned, bought and sold (Matter of Leisure Vue v. Commissioner of Taxation & Fin., *supra*). The Division argues that electricity cannot be a "good" because it is not "tangible" or "matter."

Much energy has been expended on arguing about the nature of electricity in order to show that it is or is not a "good." In this regard, reliance on dictionary definitions of the scientific terms at issue is not particularly helpful. For example, the Division cites Black's Law Dictionary (5th ed) for the proposition that electricity is "a highly subtle imponderable fluid," apparently on the theory that if electricity is "imponderable," it is not "matter" since it would not have measurable weight. (The Division does not explain why, if electricity is a "fluid," it would not be "tangible.") While we are unable to find this definition in the fifth edition of Black's Law Dictionary, it is, in any case, of no value. The testimony of Dr. Holbrow, petitioners' expert witness, on the properties of electricity, was uncontradicted by the Division. We have no reason not to rely on this testimony for the scientific facts applicable to this case.

While we learned from Dr. Holbrow's testimony that the nature of "matter" and the composition of the basic elements that compose our universe is a subject of continuing scientific inquiry, his uncontroverted testimony was that electricity consists of electrons which have mass, and can be isolated and measured at rest. In scientific terms, electrons and electricity are considered to be tangible "matter." Therefore, we conclude that, for our purposes,

electricity has the tangibility required to be considered a "good."

The Division cites Matter of Leisure Vue v. Commissioner of Taxation & Fin. (*supra*) as determinative of the present case arguing that Leisure Vue establishes that electricity cannot be considered a "good." In Leisure Vue, the petitioner provided paid television service to individual customers. The petitioner claimed an investment tax credit under Tax Law § 210.12(b) on its corporate franchise tax return for equipment that "down-converted" or reduced electromagnetic wave signals emitted by transmission companies to widths compatible with the petitioner's customers' televisions. The petitioner conceded that the electromagnetic waves were "intangible." We denied the credit, concluding that "electromagnetic waves were not 'matter' within the meaning of the statute nor was the result of the down-conversion 'goods' within the meaning of the statute" (Matter of Leisure Vue, Tax Appeals Tribunal, August 19, 1988). The Appellate Division upheld our decision, noting that the equipment "simply narrows the width of intangible electromagnetic signals" (Matter of Leisure Vue v. Commissioner of Taxation & Fin., *supra*, 568 NYS2d 175, 176, emphasis in original).

This conclusion is supported by Dr. Holbrow's testimony. Dr. Holbrow testified that the properties of waves and electricity are essentially different as waves have no mass and cannot be isolated and measured at rest.

Further, in the present case, it is the electricity itself which is the final product, usable and marketed when the hydroelectric facility has completed its process, i.e., when the electrons in the wire are oscillating at the appropriate frequency and the voltage and amplitude of the current have been modified to meet the specifications of the customer (Niagara Mohawk). In Leisure Vue, the product was a service consisting of the television programming and not the down-converted electromagnetic waves themselves. Here, the electricity itself has intrinsic marketable value, and is the product sold by the facility. The electromagnetic waves were not themselves items of value, as they served only as the means of transmitting what was being

sold, the television programming.<sup>5</sup>

We are unpersuaded by the Division's arguments that, because the definitions of "goods" in various nontax statutes (such as the Penal Law, Public Service Law and Energy Law) do not specifically mention "electricity," electricity cannot be a good. Those statutes have different goals than the one before us and, in our view, their definitions of "goods" are not persuasive (see, Matter of St. Joe Resources Co. v. New York State Tax Commn., 72 NY2d 943, 533 NYS2d 51 [adopting the dissenting opinion of Matter of St. Joe Resources Co. v. New York State Tax Commn., 132 AD2d 98, 522 NYS2d 252]).

We do not agree that the Legislature's various references to electricity, electrical service, or generating in Article 28 establish that the Legislature thought that electricity was not tangible personal property or a "good" for purposes of the investment tax credit. There is evidence of a legislative understanding that electricity is tangible personal property in Article 28; for example, the specific exclusion of electricity from the definition of tangible personal property in Tax Law § 1101(b)(6) would not be necessary unless the Legislature believed that electricity ordinarily does constitute tangible personal property. While all the references to electricity or generating in Article 28 are, perhaps, not precisely consistent, no evidence has been presented which would indicate that use of these terms in sections of Article 28 and not in section 606(a) reveals that the Legislature did not intend electricity to be considered a "good."

While we agree with the Division that case law from other states on the treatment of electricity as a "good" should be treated with caution (see, Matter of St. Joe Resources Co. v. State Tax Commn., supra), we agree with the Administrative Law Judge that, as support for the common and ordinary meaning of terms, it provides guidance. It is enough to say that our view that electricity is tangible personal property is not unique (see, Curry v. Alabama Power Co., 243 Ala 53, 8 So 2d 521; Hetherington v. Camp Bird Mining, Leasing & Power Co., 70 Colo 531, 202 P 1087; State Tax Commn. v. Marcus J. Lawrence Mem. Hosp., 108 Ariz 198, 495

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<sup>5</sup>As the Administrative Law Judge correctly noted, electricity is not like stocks and bonds which "represent value but have no intrinsic practical use or value in themselves" (Determination, p. 16, footnote 4).

P2d 129).

In particular, the language of the United States Supreme Court in Utah Power & Light Co. v. Pfof (286 US 165) articulates our view of the matter.<sup>6</sup> While the principal issue in Utah Power was whether electricity was produced for purposes of a Utah tax on the production of electricity, the court's opinion establishes that the court considered electricity to be a "product" in the same sense as we consider electricity to be a "good" here. In reaching its conclusion the court stated:

"[a]ppellant here, by means of what are called generators, converts the mechanical energy of falling water into electrical energy. Thus, by the application of human skill, a distinct product is brought into being and transmitted to the places of use. The result is not merely transmission; nor is it transmission of the mechanical energy of falling water to the places of consumption; but it is, first, conversion of that form of energy into something else, and, second, the transmission of that something else to the consumers."

The court further stated:

"[t]he process by which the mechanical energy of falling water is converted into 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" (Utah Power & Light Co. v. Pfof, supra, at 180, emphasis added).

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<sup>6</sup>In Utah Power the state of Idaho levied a license tax on the manufacture, generation or production, within the state, for barter, sale or exchange, of electricity and electrical energy. The court framed the issue as follows:

"[i]s the generation of electrical energy, like manufacture or production, a process essentially local in character and complete in itself; or is it so linked with the transmission as to make it an inseparable part of a transaction in interstate commerce" (Utah Power & Light Co. v. Pfof, supra, at 178-179).

In sum, there is no question that the electricity here is a tangible commodity with intrinsic value and, therefore, for the purposes of the credit, can be considered a "good."

We turn next to the question of whether the hydroelectric facility is producing electricity by "manufacturing" within the meaning of the credit. 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" (Division's brief, p. 19). We disagree.

"Manufacturing" is defined by Tax Law § 606(a)(2)(B)(i) as the process of "working raw materials into wares" or the process "which gives new shapes, new quality or new combinations to matter which already has gone through some artificial process." Whether the activity of the hydroelectric facility, i.e., transforming electrons in the copper coils and transmission wires from random to ordered oscillation creating usable electrical energy, is characterized as the process of working the raw material of electrons into the ware of electricity, or the process of giving the raw material electrons a new shape, quality or combination, the definition of manufacturing is met.

First, the definition of "ware" includes goods (see, The Merriam-Webster, Webster's Third New Intl. Dictionary 2576 [1986] [which in part defines ware as "1 a: manufactured articles, products of art or craft, or farm produce offered for sale: articles of merchandise: goods, commodities"]). Since we have already concluded that the electricity produced by the hydroelectric facility is a good, we also conclude it is a ware as that term is used in the statute.

Second, the copper coils which are passed through the magnetic field to produce the electricity have themselves been manufactured, thus meeting the second aspect of the statutory definition, i.e., a process which gives new shapes, new quality or new combinations to matter which already has gone through some artificial process by the use of machinery.

Moreover, as the United States Supreme Court stated in Utah Power:

"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" (Utah Power

& Light Co. v. Pfost, supra, at 179, emphasis added).

The New York Court of Appeals addressed the ordinary, everyday usage of the term "manufacturing" as it applied to the production of electricity in Matter of Brush Elec. Illuminating Co. v. Wemple (129 NY 543). In Brush, the court determined that electric light and power companies were entitled to a statutory tax exemption as "manufacturing" companies until the Legislature specifically amended the statute to exclude them. In making its determination, the court stated:

"[t]he 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 . . . . 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" (Matter of Brush Elec. Illuminating Co. v. Wemple, supra, at 552).

Additionally, the court stated that:

"[i]f due weight is given to the fact that electricity, as now used and applied to the business of life, such as the lighting of streets and buildings, the propulsion of cars and machinery, and like operations, is essentially the product of the skill and labor of man, there is no difficulty in reaching the conclusion that a corporation engaged in the business of generating, storing, transmitting, and selling it is what was commonly known at the time of the passage of the corporation tax law in 1880,--a manufacturing corporation" (Matter of Brush Elec. Illuminating Co. v. Wemple, supra, at 554).

These arguments apply equally to whether the production of electricity can be considered "processing" within the meaning of the credit. While Tax Law § 606 does not contain a definition of processing, the definition used in cases involving the investment tax credit before the former State Tax Commission is appropriate. In Matter of John Georgallas Banana Distribs. of New York (State Tax Commn., November 22, 1984), "processing" is defined as "an operation whereby raw material is subjected to some special treatment, by artificial or natural

means, which transforms or alters its form, state or condition" (see also, Matter of Hudson Cold Stor. & Freezer Corp., State Tax Commn., September 9, 1983). This definition of "processing" is quite similar to the second part of the "manufacturing" definition.

While we agree that the scientific testimony here does not, in and of itself, answer the question of whether the credit applies, the scientific testimony provides us with the same kind of evidence that the expert testimony in Matter of Niagara Frontier Servs. (Tax Appeals Tribunal, August 9, 1990) supplied, and the analysis we applied in that case is equally applicable.

In Niagara Frontier, uncontradicted testimony by the petitioner's expert witnesses established that "the procedure utilized in petitioner's banana rooms initiates and effects a significant change in the physical nature and form of the banana from an inedible fruit into an edible and saleable banana." As a result, we concluded that the petitioner's equipment qualified for exemption from sales and use tax as machinery and equipment used in "processing."

The Division argues that the production of electricity cannot be considered "manufacturing" or "processing" because the credit is not available under Article 9 for electricity producing facilities taxed under that Article. We do not agree. It is clear that the Legislature has chosen to treat the unique set of taxpayers (in general, regulated utilities) covered by Article 9 according to an entirely different taxing scheme from the income tax scheme applicable here. Given that the Article 9 tax is based upon a taxpayer's gross receipts without credits or deductions, the absence of the investment tax credit in Article 9 cannot be considered indicative of the Legislature's intentions in section 606(a), a section directed to an entirely different set of taxpayers.

Further, merely because the Legislature did not specifically indicate that it had hydroelectric or other electricity producing facilities in mind when it enacted the investment tax credit, does not mean that the credit cannot apply.<sup>7</sup> Here, the Legislature intended by this

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<sup>7</sup>As has been noted previously, the construction of new hydroelectric facilities by independent power producers, i.e., not by regulated utilities, is a fairly recent phenomenon.

legislation to encourage capital construction in the state in order to create economic growth and job opportunities. The hydroelectric facility here furthered these goals. The record indicates that while hydroelectric facilities are dependent upon water sources, they do not have to be located in New York in order to service the New York market.<sup>8</sup>

Petitioners' witnesses testified that the existence of the credit was a factor in determining whether to build a facility at this location. They further testified to the existence of additional jobs in the state, first as a result of the construction of the facility, and then to run and manage the facility.

We, therefore, find that the credit applies to the production of electricity by a hydroelectric facility.<sup>9</sup>

We now turn to the Division's claim that petitioners are not entitled to the credit because they failed to introduce evidence in support of their computation of the credit.

The Administrative Law Judge concluded that: 1) "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)" (Determination, p. 25) and 2) remarks made by the Division's counsel during his opening statement at the hearing did not comprise sufficient notice that petitioners were required to introduce evidence in support of the computation of the credit. We agree.

Petitioners were issued a Statement of Personal Income Tax Audit Changes, dated

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<sup>8</sup>For example, an energy facility located in Erie, Pennsylvania cannot only service the New York market (by selling the power it generates to a New York utility or the New York Power Pool) but can also receive the same rate benefits under section 66-c of the Public Service Law as a New York facility (see, Niagara Mohawk Power Corp. v. Public Serv. Commn., 138 AD2d 63, 530 NYS2d 626, lv denied 73 NY2d 702, 536 NYS2d 743).

<sup>9</sup>Our conclusion here is in accord with the Division's position in Matter of Parsons & Whittemore (Tax Appeals Tribunal, October 3, 1991) where the Division stipulated that a facility which produced electricity from garbage was entitled to the credit. This stipulation postdated the Advisory Opinion in Newport Hydro Assocs. (TSB-A-88[5]-I).

October 31, 1989, which recalculated the tax owed plus interest for the years 1986 and 1987 (Division's Exhibit "E"). Computation schedules were attached but provided no detail as to the figures cited. The Statement of Audit Changes gave as an explanation for the adjustment that "per the attached Advisory Opinion hydroelectric facilities do not qualify for New York investment tax credit" (Division's Exhibit "E"). The attached Advisory Opinion, which was dated April 29, 1988, had been issued in response to a petition by Newport Hydro Assocs. (TSB-A-88[5]-I). The advisory opinion determined, under facts similar to this case, 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's answer specifically reiterated this legal issue as the reason for the rejection of petitioners' claim for credit and included a general denial. The Division argues that this, coupled with the statements made by Division's counsel at the hearing, establishes that petitioners were on notice that they were required to submit evidence on their computation of the credit.

We do not agree. First, the general denial contained in the Division's answer did not put petitioners on notice that petitioners' computation of the credit was also at issue in light of the specific and continued references to the legal issue as the reason for the Division's denial of the credit.

The Division's counsel cites the following statement made during his opening statement at the hearing as support for the Division's position that petitioners were on notice that the computation of the credit was at issue: "the taxpayer [sic] must show that they are entitled to the credit under the standards set forth in the Tax Law" (Hearing Transcript, p. 8). However, this statement was followed immediately by the statement quoted in the findings of fact concerning petitioners' obligation to show that they were not excluded from obtaining the credit by reason of Tax Law § 606(a)(3) and (4).<sup>10</sup> The Division's counsel's very next statement was as follows:

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<sup>10</sup>Tax Law § 606(a)(3) and (4) is clearly not at issue in the present case. Subsection (a)(3) states that "[a] taxpayer shall not be allowed a credit under . . . [Tax Law § 606(a)(2)(B)(i)] if such property [would] qualif[y] for the modification allowed under [Tax Law § 612(g)]." Tax

"this is not actually a case of first impression, though a case where the same issue involving a corporation rather than a partnership has been briefed and is presently before another administrative law judge" (Hearing Transcript, pp. 8-9). This statement could reasonably have been taken to mean a continued reference to the legal issue in the case.

When petitioners' counsel made his opening statement, he stated that he believed that the taxpayers and the Division agreed that the broad issue was whether a hydroelectric facility qualified for the investment tax credit. Division's counsel did not object to this characterization. During closing arguments, Division's counsel limited his remarks to statements concerning whether a hydroelectric facility was engaged in manufacturing or processing, and whether electricity was a "good." Nothing was said about petitioners' failure to prove computation of the credit as a reason for the Administrative Law Judge to uphold the assessment.

Under these circumstances, we think the same reasoning we followed in Matter of Anton's Car Care Center (Tax Appeals Tribunal, November 23, 1988) applies. In Anton's Car Care, we rejected the Division's attempt to assert a penalty after the conclusion of the hearing, quoting from Matter of Murray v. Murphy (24 NY2d 150, 299 NYS2d 175): "[t]he first fundamental of due process is notice of the charges made. This principle equally applies to an administrative proceeding for even in that forum no person may lose substantial rights because of wrongdoing shown by the evidence but not charged" (Matter of Murray v. Murphy, *supra*,

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Law § 612(g)(3) generally applies, inter alia, to tangible personal property which was (a) constructed, reconstructed, erected, or acquired between December 31, 1963 and December 31, 1967, pursuant to a contract or plan which was in effect and/or binding before December 31, 1967, or (b) constructed, reconstructed, erected, or acquired after December 31, 1967, and not thereafter substantially modified. Tax Law § 612(g)(4) in similar fashion applies to property acquired, constructed, reconstructed, erected or acquired after December 31, 1967, pursuant to a contract or plan in existence on or prior to December 31, 1968. These tax sections are clearly not applicable, as the construction of the hydroelectric plant in question did not take place until the early 1980's and was not pursuant to any contracts binding before that same period. Section 606(a)(4) is also inapplicable as it disallows the credit if the property in question is leased to any other person or corporation. The record established that petitioners are limited partners in a limited partnership that constructed, owned and operated the hydroelectric facility.

299 NYS2d 175, 181). The remarks of the Division's counsel were not specific enough to fully notify petitioners of the alternative ground for the assessment. As the Administrative Law Judge stated in her conclusion: "[i]n 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)" (Determination, p. 26).

Accordingly, it is ORDERED, ADJUDGED and DECREED that:

1. The exception of the Division of Taxation is denied;
2. The determination of the Administrative Law Judge is affirmed;
3. The petition of Frederick R. and Anne M. Clark is granted; and
4. The notice of determination dated December 26, 1989 is cancelled.

DATED: Troy, New York  
September 14, 1992

/s/John P. Dugan  
John P. Dugan  
President

/s/Francis R. Koenig  
Francis R. Koenig  
Commissioner

/s/Maria T. Jones  
Maria T. Jones  
Commissioner