

STATE OF NEW YORK

STATE TAX COMMISSION

In the Matter of the Petition	:	
	:	
of	:	
	:	
ROCHESTER GAS AND ELECTRIC CORPORATION	:	DECISION
	:	
for Revision of a Determination or for Refund	:	
of Sales and Use Taxes under Articles 28 and 29	:	
of the Tax Law for the Period March 1, 1976	:	
through November 30, 1979.	:	

Petitioner, Rochester Gas and Electric Corporation, 89 East Avenue, Rochester, New York 14649, filed a petition for revision of a determination or for refund of sales and use taxes under Articles 28 and 29 of the Tax Law for the period March 1, 1976 through November 30, 1979 (File No. 31524).

A formal hearing was held before Daniel J. Ranalli, Hearing Officer, at the offices of the State Tax Commission, One Marine Midland Plaza, Rochester, New York, on March 15, 1984 at 9:15 A.M., with all briefs to be submitted by June 1, 1984. Petitioner appeared by Nixon, Hargrave, Devans & Doyle (Robert W. Wild, Esq., of counsel). The Audit Division appeared by John P. Dugan, Esq. (Thomas A. Sacca, Esq., of counsel).

ISSUES

I. Whether certain purchases of property and services made by petitioner were subject to sales tax as the maintenance, service or repair of real property.

II. Whether certain purchases of equipment made by petitioner were exempt from sales tax as purchases of machinery or equipment for use or consumption directly and predominantly in the production of gas and electricity.

FINDINGS OF FACT

1. On February 1, 1980, as the result of a field audit, the Audit Division issued a Notice of Determination and Demand for Payment of Sales and Use Taxes Due against petitioner Rochester Gas and Electric Corporation in the amount of \$716,213.88, plus interest of \$174,259.49, for a total due of \$890,473.37 for the period March 1, 1976 through November 30, 1979. On the same date, the Audit Division issued a second notice against petitioner in the amount of \$30,712.78, plus interest of \$419.74, for a total due of \$31,132.52 for the period September 1, 1979 through November 30, 1979.

2. On November 27, 1979, petitioner executed a consent extending the period of limitation for assessment of sales and use taxes for the period March 1, 1976 through November 30, 1976 to February 1, 1980.

3. Petitioner is a gas, electric and steam utility engaged in the business of production and distribution of electricity, steam and natural gas. The energy required to generate electricity is derived from water power, fossil fuels and nuclear power. Petitioner provides utility services to customers in nine counties in the Rochester area.

4. On audit, the auditor determined that sales tax was due on various purchases made by petitioner during the audit period. Sales by petitioner to its customers were not audited. Petitioner utilizes a direct payment permit for virtually all of its purchases. To determine sales tax due on purchases, the auditor performed a two-step analysis of petitioner's records. First, the auditor examined, in detail, all purchases of \$25,000.00 or more made during the audit period and determined tax due of \$216,635.65 on such purchases. The second half of the audit involved utilization of a one-year test period. The auditor examined approximately five percent of the purchases under \$25,000.00

during the test period. The tax determined to be due from the test period was then projected over the entire audit period resulting in sales tax due on purchases less than \$25,000.00 of \$531,889.76. A credit of \$1,598.75 was allowed, resulting in total tax due of \$746,926.66. Petitioner did not object to the audit methods employed including the projection of the sample purchases tested over the entire audit period.

5. At a pre-hearing conference, it was determined that no tax was due on several of the purchases resulting in the reduction of the assessment by \$120,178.87. Petitioner agreed to \$328,606.03 of the assessment, leaving an amount in issue of \$298,141.76. At the hearing, the Audit Division conceded that no tax was due on the purchase of a spoil and debris removal service from a capital improvement project, thus further reducing the assessment by \$3,113.29.

6. The auditor determined that tax was due on the purchase of the service of fly ash removal from some of petitioner's plants. Fly ash is a by-product of the combustion of coal. It is a light, fluffy material that must be collected by petitioner to comply with pollution control regulations. If the fly ash were not collected, it would rise up the smokestacks, be released into the atmosphere and contribute to air pollution. Petitioner employs independent contractors to haul the fly ash away in trucks. This removal process continues for 24 hours a day, 6 days a week. A very small percentage of the fly ash is sold to concrete companies to use in cement and the remainder is removed to a landfill. The Audit Division's position is that the fly ash removal is subject to tax as the service of trash or garbage removal. Petitioner maintains that the fly ash removal is a transportation service and thus not taxable.

7. Petitioner installed an air conditioning system in its data processing room in 1965 at a total cost of \$10,090.00. In 1979, one of the compressors in

the system had to be replaced at a cost of \$3,477.23 including labor costs of \$786.00. The Audit Division's position is that the replacement of the compressor constituted maintenance, service or repair to real property and thus subject to tax. Petitioner maintains that the compressor replacement was a capital improvement to real property and thus not subject to tax. The removal and replacement of the compressor involved the removal of several bolts and the disconnecting of various electrical and plumbing connections. No damage occurs to either the air conditioning unit or the electrical and plumbing connections during the process.

8. The two basic pieces of equipment used in the production of electricity are the boiler and the turbine generator. A boiler is 20 feet square and 60 to 80 feet high. Welded to the top of each boiler is a piece of equipment known as a superheater. The superheater is a series of bends of two inch diameter tubing which runs across the entire top of the boiler. Water comes into the boiler where it is heated and turned into steam. The steam then goes into the superheater which extracts more heat from the fuel and heats the steam further, in effect superheating the steam. The superheated steam then goes in to the turbine generator where it turns the wheels on the generator which in turn rotates the generator rotor which generates electricity. After passing through the turbine generator, the steam is returned to a reheater in the boiler where it is reheated and returned to the turbine generator.

9. During the audit period, the superheater tubes on two boilers had worn to the point that the entire units had to be replaced. An engineering firm was employed to construct the new units at the plant site. Each boiler and generator system was shut down for four to six weeks. The old superheater systems had to be cut from the boiler and the new systems welded on. The cost of the projects

was approximately \$74,000.00 for each system. The Audit Division considers the installation charge for the replacement of the superheaters to be taxable as the maintenance, service or repair of real property. Petitioner maintains that the superheater replacement was a capital improvement and not subject to tax.

10. The turbine in the turbine generator consists of a shaft with a fan-like series of blades attached. The blades, known as buckets, vary in size from one inch to twenty inches long. Steam comes into the rotating part of the turbine through a nozzle, impinges on the blades and travels through a series of fixed and rotating rings until it has worked its way through the turbine. The steam then enters a condenser where it is condensed back into water and returned to the boiler to be used over again. The buckets may wear out due to impurities in the steam. When this occurs, usually an entire wheel of buckets (i.e. one ring of blades around the shaft) is replaced at one time. In the present case, a wheel was shipped to Buffalo, New York where the bucket replacement occurred. At the same time, since the turbine had to be shut down, other parts of the turbine, such as the nozzle and the diaphragm, were also sent to the contractor for repair work. The Audit Division considers labor costs for the bucket replacement and miscellaneous turbine work to be maintenance or repair of real property. Petitioner argues that the work performed was a capital improvement and not subject to tax.

11. During the period in issue, petitioner had one nuclear power plant, the Ginna plant, in operation and a second one, the Sterling plant, in the advanced planning and design stage. In connection with the proposed construction of the Sterling plant, certain seismic tests were performed on the switchboards to be used in the control room at the plant. The tests are required by Nuclear Regulatory Commission ("NRC") regulations which provide that all switchboards

intended for use in a nuclear plant must obtain certification with respect to seismic standards. The tests consist of shaking the boards in a manner which simulates an earthquake of a specified magnitude while controlling temperature and humidity at required levels. Petitioner was involved with four other utilities in the design and testing of the Sterling plant under the standardized nuclear unit power plant system ("SNUPPS"). According to the SNUPPS concept, the five utilities joined together in a joint venture and agreed to design and build five nuclear power plants according to a common design. Pursuant to the agreement, all five of the utilities contributed to the cost of testing the board. The board manufacturer sent the board directly to a General Electric facility for testing. Following the test, a report was sent to the SNUPPS group. The report was for the use of the SNUPPS group only and was of no value to anyone else. One board had to qualify under the testing. If that board met the NRC requirements, the manufacturer was to produce four more boards for all the SNUPPS members. The switchboard itself was never delivered to petitioner. After the audit period, the New York State Board of Electric Generation Siting and the Environment denied petitioner's application to commence construction of the Sterling plant and the plans were abandoned. Eventually, nuclear plants were built by only two of the five SNUPPS members and presumably the test switchboard was installed in one of those plants. The Audit Division maintains that the seismic testing was subject to tax as the maintenance, service or repair of tangible personal property or, alternatively, as an information service which was not personal or individual in nature. Petitioner argues that this was not a maintenance service but a part of the cost of manufacturing and that the report was information personal to the SNUPPS group which commissioned the testing.

12. Petitioner shuts down its operational nuclear power plant once a year for refueling. The fuel system consists of 121 fuel assemblies. Each assembly consists of a series of tubes filled with uranium pellets. The assemblies are placed in the bottom of the reactor. The fuel in each assembly will last a maximum of three to five years; however, petitioner refuels one third of the assemblies each year. The refueling requires a high level of skill and petitioner contracts with specialists to perform the operation. The Audit Division determined that the refueling was subject to tax as a maintenance service to real property. Petitioner's position is that a refueling service, which is not an enumerated taxable service, was performed, not maintenance of real property.

13. While the nuclear plant is shut down for refueling, as well as at other times as required, petitioner has various safety inspections performed at the plant. The inspections pertinent to the audit in issue were of the feedwater system, the turbine generator, welds, and the turbine. These inspections were generally performed by professional engineers using highly sophisticated equipment. The Audit Division determined that such inspections were taxable as the maintenance, service or repair of real property. Petitioner argues that the inspections were not subject to tax because no actual maintenance or repairs were done to the property.

14. Petitioner's nuclear plant has three water cycles. In the first cycle, the water is heated by the reactor. The water is in a closed loop because it is radioactive. In the second cycle, the water from the first cycle is used to heat water flowing in a second closed loop to make steam. The water in the first loop is then returned to the reactor and reheated. The water in the two loops does not come in contact so that the water in the second loop is not radioactive. The steam produced in the second cycle goes through the

turbine generator. In the third cycle, steam from the turbine generator is cooled in the condenser by water from a third loop. The water in the second and third loops does not mix. The third loop is an open loop which takes water from Lake Ontario and then returns it to the lake after it has passed through the condenser. The equipment at issue in this instance is located in the filtering system of the third loop's water intake tunnel. The filtering system prevents fish and lake debris from entering the loop possibly blocking the cooling water from entering. Any blockage would necessarily disrupt the production of electricity. The equipment in question has a useful life of at least five years. The Audit Division determined that the purchase of the filtering system was not exempt from sales tax as machinery or equipment for use or consumption directly and predominantly in the production of electricity. Petitioner maintains that the filtering system is an integral part of the production process in that the turbine generator unit could not function without the filtered water used in the cooling process.

15. Whenever petitioner's nuclear power plant is shut down for periodic repairs and inspections, all the water is drained from the loops. A measuring device called a Zetec Eddy Current Analyzer is then used to gauge the thickness of the tubing in order to determine whether there might be any deterioration caused by corrosion. This inspection is required by the NRC. The device is never used while the plant is in operation since the water must be drained from the loops. Another measuring instrument used by petitioner when the plant is shut down is the Ultrasonic Measuring Device. This device is used in the reactor area of the nuclear plant. It consists of a metal block made from the same material as the reactor vessel and weighs approximately 450 pounds. The device is essentially a reference standard against which measurements of the

reactor vessel can be compared when periodic examinations of underwater welds are made to ensure that no cracks or failures have occurred in such welds. Sound waves are sent through the metal of the reactor and the time that the waves take to travel through the metal and bounce back is measured against the time required for the waves to travel through the reference standard. Any discrepancy between the two times could indicate a crack in the welds. NRC regulations require the device's installation in order for petitioner to maintain its nuclear operating license. The device is not permanently installed and, when not in use, it is stored outside of the reactor area. The Audit Division determined that neither the Zetec Eddy Current Analyzer nor the Ultrasonic Measuring Device was equipment used directly and predominantly in the production of electricity. Petitioner argues that both devices are so used and alternatively maintains that the Ultrasonic Measuring Device is exempt as a capital improvement to real property since the device is included in petitioner's real property tax base.

16. When workers are in the reactor area of the nuclear plant, they are required to wear face masks for safety purposes. To test that the mask fits tightly and correctly, each individual steps into a booth into which gas is injected through an electrically operated solenoid valve. The Audit Division determined that purchase of the valve was subject to sales tax. Petitioner maintains that the valve is used directly and predominantly in the production of electricity.

17. The insulation on a generator armature at one of petitioner's plants needed replacement. The armature is the fixed part of a generator. It consists of an iron core around which copper bars called coils are wound in rows. When the generator shaft revolves around the armature, electricity is produced;

therefore, the armature is a key part of the generator. In the instant case, the armature was completely refurbished at the plant site. Technicians from General Electric performed the work. The technicians removed the armature and completely replaced the coils saving only the iron core. New upgraded coils with less chance of wear were wound around the old iron core, and what was essentially a new armature was replaced in the generator at a cost of \$275,000.00. The Audit Division's position is that the armature replacement was a maintenance or repair of real property and thus subject to sales tax. Petitioner argues that the substance of the transaction was not a service to real or personal property but the purchase of a piece of exempt machinery or equipment.

18. The feedwater cycle of petitioner's nuclear plant described supra consists of a series of high pressure feedwater heaters through which water runs during the heating process. The feedwater heater itself consists of a shell with a tube bundle in it. The tubes are approximately 15 to 20 feet long and a bundle is 4 feet in diameter. One of the heaters needed replacement and, as part of the process, the tube bundle was returned to the manufacturer. The bundle is held together by support braces. The manufacturer removes the support braces and replaces the old tubes with new ones. The old bundle is sent because each heater has an individual design and the old tubing is used as a basis to model the new tubing. The manufacturer replaces the support brackets and ships the new bundle back to petitioner's plant. The Audit Division determined that the feedwater heater replacement was a taxable repair or service to real property. Petitioner's position is that this was a purchase of a new piece of equipment used directly and predominantly in the production of electricity and is, therefore, exempt. Alternatively, petitioner maintains

that the purchase of the tubing is exempt as the purchase of a capital improvement to real property.

CONCLUSIONS OF LAW

A. That section 1105(c)(5) of the Tax Law imposes a sales tax on the receipts from every sale, except for resale, of the service of "[m]aintaining, servicing or repairing real property, property or land, as such terms are defined in the real property tax law, whether the services are performed in or outside of a building, as distinguished from adding to or improving such real property, property or land, by a capital improvement..." and including the service of trash removal from buildings.

B. That 20 NYCRR 527.7(a)(1) provides:

"Maintaining, servicing and repairing are terms which are used to cover all activities that relate to keeping real property in a condition of fitness, efficiency, readiness or safety or restoring it to such condition. Among the services included are services on a building itself such as painting; services to the grounds, such as lawn services, tree removal and spraying; trash and garbage removal and sewerage service and snow removal."

C. That the removal of fly ash from petitioner's plants falls within the category of trash removal and is a maintenance service within the meaning and intent of section 1105(c)(5) of the Tax Law. The fly ash is merely a waste product of the production of electricity and, except for a very small portion, it has no practical use and is hauled away to a landfill as is any other trash and debris. Therefore, petitioner's argument that the removal is a transportation service is without merit. Likewise, petitioner's reliance on Niagara Mohawk Power Corp. v. Wanamaker, 286 A.D. 446, 449, is misplaced. In Wanamaker, the coal and ash handling equipment was purchased for use in transporting the materials around the plant; there were no purchases of trucks to haul the ashes

to a landfill. The fly ash removal is, therefore, subject to sales tax as the purchase of the service of maintaining, servicing or repairing real property.

D. That 20 NYCRR 527.7(a)(3) defines capital improvement as an addition or alteration to real property:

"(i) which substantially adds to the value of the real property, or appreciably prolongs the useful life of the real property, and

(ii) which becomes part of the real property or is permanently affixed to the real property so that removal would cause material damage to the property or article itself, and

(iii) is intended to become a permanent installation."

E. That the compressor replacement discussed in Finding of Fact "7", despite its high cost, must be considered the maintaining, servicing or repairing of real property rather than a capital improvement. The compressor is not permanently attached to the air conditioning unit; it was readily removable by disconnecting the electrical and plumbing lines and removing the bolts. Therefore, the compressor replacement was taxable under section 1105(c)(5) of the Tax Law.

F. That, although the superheater installation discussed in Findings of Fact "8" and "9" was a major project costing over \$140,000.00, it was, essentially, a repair of the boiler and not a capital improvement. Despite the fact that the old superheaters had to be cut from the boilers and the new ones welded on, there was no real damage to the boiler. Therefore, the superheater installation was taxable under section 1105(c)(5) of the Tax Law.

G. That the bucket replacement and miscellaneous turbine work discussed in Finding of Fact "10" cannot be considered capital improvements as maintained by petitioner. The turbine buckets were readily replaceable without any damage to the turbine or to the blades themselves and the record does not indicate that the bucket replacement substantially increased the value of the turbine or

prolonged its useful life. The same is true of the miscellaneous work performed on items such as the nozzle and the diaphragm. All of the work on these items was clearly in the category of maintaining, servicing or repairing real property within the meaning and intent of section 1105(c)(5) of the Tax Law and properly subject to tax as such.

H. That the seismic tests performed on the switchboard for the SNUPPS group as discussed in Finding of Fact "11" were conducted as part of the design process and subject to approval by the members of SNUPPS. The test board was never delivered to petitioner and such a prototype test cannot be considered a maintenance and repair of tangible personal property within the meaning and intent of section 1105(c)(3) of the Tax Law nor was the test report an information service under section 1105(c)(1). The test was, in fact, a professional engineering service provided by General Electric. Such a service is not one of those enumerated as taxable under the Sales and Use Tax Law and, therefore, the testing was not subject to tax.

I. That the taxability of the refueling service discussed in Finding of Fact "12" is dependent upon when title to the uranium fuel pellets passed to petitioner. (See e.g., 20 NYCRR 528.10(c) [taxability of airline fueling services is dependent upon vesting of title]). Inasmuch as petitioner hired specialists, other than the sellers of the fuel, to perform the refueling and there was no showing that title to the pellets vested after the refueling had occurred, the refueling charges were taxable as a maintenance service to real property under section 1105(c)(5) of the Tax Law.

J. That the various inspections performed at petitioner's nuclear plant are part of the normal activities that relate to keeping real property in a condition of fitness, efficiency, readiness or safety. It does not matter that

an actual repair was or was not done (see e.g. 20 NYCRR 527.5(a)(3) Example 6), rather, the question is whether the service rendered is an activity which is part of the process of keeping property in a state of readiness and fitness. The inspections in issue accomplished this service by keeping petitioner's officials informed of the condition of the plant so as to assist them in maintaining the plant at its standard level of efficiency and readiness. Therefore, the inspections were properly subject to tax as the maintaining, servicing or repairing of real property within the meaning and intent of section 1105(c)(5) of the Tax Law and 20 NYCRR 527.7(a)(1).

K. That section 1115(a)(12) of the Tax Law provides, in part, for an exemption from sales tax on the receipts from the sale of "[m]achinery or equipment for use or consumption directly and predominantly in the production of...electricity...for sale...but not including parts with a useful life of one year or less...". The term "part" is further defined in 20 NYCRR 528.13(e)(1)(i) to mean "a replacement for any portion of a machine or piece of equipment, and any device actually attached to the machinery or equipment and used in connection with the performance of its function."

L. That the water filtering system described in Finding of Fact "14" is so integrated with the feedwater system which is the primary system for providing steam to the turbine generator which produces electricity as to be used directly and predominantly in the production of electricity for sale. The system must be in use constantly while the plant is in operation to keep a smooth flow of water running into the feedwater loops from the lake. Any failure of the filter system could cause a complete interruption of the production process. The purchase of the water filter system is therefore exempt from sales tax under section 1115(a)(12) of the Tax Law.

M. That the Zetec Eddy Current Analyzer, the Ultrasonic Measuring Device and the electrically operated valve discussed in Findings of Fact "15" and "16" are not in the category of machinery or equipment used directly and predominantly in the production of electricity. Each of the items is merely a testing or inspection device which is not in any way connected with the production process. In fact, the Zetec Analyzer and Ultrasonic Device are not used when the plant is in operation. They, of necessity, must be used when the plant is shut down for refueling or inspections. The purchase of the three items in issue is not, therefore, exempt from sales tax under section 1115(a)(12) of the Tax Law.

N. That, with respect to the generator armature and high pressure feedwater heater discussed in Findings of Fact "17" and "18", respectively, neither item was the purchase of the service of maintaining, servicing and repairing real property under section 1105(c)(5) discussed supra. Rather, both items constituted the purchase of parts used directly and predominantly in the production of electricity and having a useful life in excess of one year. The feedwater heater replacement was a new item. The only reason the old tubing was shipped to the manufacturer was for use as a model for the manufacture of the new tubing. No repair work of any kind was performed on the old tubing. The generator armature was completely refurbished with the iron core being the only original part remaining in the finished product. The major components of the armature, the coils, were completely new and the product which was eventually shipped to petitioner was essentially a new armature manufactured with upgraded materials. The purchases of the armature and the feedwater heater were, therefore, not subject to tax under section 1105(c)(5) of the Tax Law, but rather were exempt purchases under section 1115(a)(12) of the Tax Law.

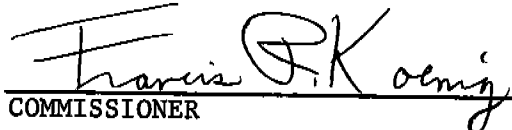
O. That the petition of Rochester Gas and Electric Corporation is granted to the extent indicated in Finding of Fact "5" and Conclusions of Law "H", "L" and "N"; that the Audit Division is directed to modify the notices of determination and demand for payment of sales and use taxes due issued February 1, 1980 accordingly; and that, except as so granted, the petition is in all other respects denied.

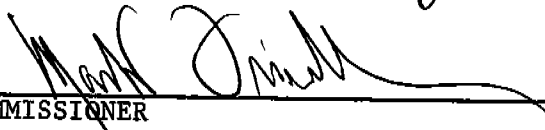
DATED: Albany, New York

STATE TAX COMMISSION

MAR 06 1985


PRESIDENT


COMMISSIONER


COMMISSIONER