STATE OF NEW YORK

DIVISION OF TAX APPEALS

In the Matter of the Petition	:	
of	:	
CONSTELLATION NUCLEAR POWER PLANTS LLC	:	DETERMINATION
	:	DTA NO. 823553
for Redetermination of a Deficiency or for Refund of Corporation Franchise Tax under Article 9-A of the Tax Law for the Years 2001 through 2005.	:	

Petitioner, Constellation Nuclear Power Plants LLC, filed a petition for redetermination of a deficiency or for refund of corporation franchise tax under Article 9-A of the Tax Law for the years 2001 through 2005.

On May 3, 2012 and May 4, 2012, respectively, petitioner, appearing by Christopher L. Doyle, Paul R. Comeau and Elizabeth Pascal, Esqs., and the Division of Taxation, appearing by Amanda Hiller, Esq. (Jennifer L. Baldwin, Esq., of counsel), waived a hearing and agreed to submit this matter for determination based on documents and briefs submitted by October 23, 2012, which date began the six-month period for the issuance of this determination. After review of the evidence and arguments presented, Timothy Alston, Administrative Law Judge, renders the following determination.

ISSUES

I. Whether petitioner has established that certain assets used in the operation of its nuclear power plants were principally used in the production of goods and thereby established

entitlement to investment tax credits and employment incentive credits with respect to such assets.

II. Whether petitioner has established entitlement to investment tax credits for industrial waste treatment facilities and air pollution control facilities with respect to certain assets used in the operation of its nuclear power plants.

III. Whether petitioner has established that it was an industrial or manufacturing business as defined in Tax Law § 14-a(b) and thereby entitled to credit for energy taxes available to such businesses pursuant to Tax Law § 14-a(a).

FINDINGS OF FACT

Petitioner and its acquisition of nuclear power plants in New York

1. During 2001 through 2005, Constellation Nuclear Power Plants, Inc., was a wholly-owned subsidiary of Constellation Energy Nuclear Group LLC, formerly doing business as Constellation Generation Group, which was wholly owned by Constellation Energy Group, Inc. (Constellation Energy). On October 16, 2009, Constellation Nuclear Power Plants, Inc. converted to Constellation Nuclear Powers Plants LLC under Delaware law. Constellation Nuclear Power Plants, Inc. and Constellation Nuclear Power Plants LLC are referred to herein as "petitioner."

2. On November 7, 2001, petitioner purchased from Niagara Mohawk 100 percent of the assets of Unit 1 and an 82 percent interest in the assets of Unit 2 of Nine Mile Nuclear Power Station in Scriba, New York (collectively Nine Mile). Following the acquisition, petitioner owned 100 percent of the Unit 1 assets of Nine Mile and 82 percent of the Unit 2 assets of Nine Mile. Long Island Power Authority (LIPA) owned the remaining 18 percent of the Unit 2 assets of Nine Mile.

3. During 2001 through 2005, LIPA had the right to receive 18 percent of the electricity generated from the operation of Unit 2 and was responsible for paying 18 percent of Unit 2's operating costs.

4. On June 10, 2004, petitioner purchased all of the assets of R.E. Ginna Nuclear Power Station (Ginna) in Ontario, New York.

5. Petitioner sells all of the electricity generated at Nine Mile and Ginna to customers in the ordinary course of its business. Petitioner does not sell steam or water.

How Petitioner's New York nuclear power plants operate

Nine Mile

6. Nine Mile Units 1 and 2 are boiling water reactors. Unit 1 is a BWR-4 design with a Mark I containment system and supression pool. It began operation in 1970. Unit 1 generated approximately 4.65 billion kilowatt hours of electricity each year from 2002 through 2005. Unit 2, which came online in 1988, is a BWR-5 design with a Mark II containment system and supression pool. Unit 2 generated approximately 9.3 billion kilowatt hours of electricity each year from 2002 through 2005.

7. A boiling water reactor contains the reactor vessel, which is vertically mounted within a containment structure. The nuclear fuel assemblies are inside the vessel's core. Unit 1 at Nine Mile contains 532 fuel assemblies. Each fuel assembly contains 62 fuel rods and 129 cruciform-shaped boron carbide control rods. Unit 2 has 764 fuel assemblies, each with 62 fuel rods and 185 control rods. The fuel assemblies are installed vertically in the core of the reactor vessel. When the control rods are in place, nuclear fission is arrested. As the control rods are drawn out from between the fuel rods, nuclear fission occurs, generating the heat needed to boil the feedwater creating steam.

8. Ultrapure feedwater is pumped into the reactor vessel through nozzles near the top of the vessel, well above the top of the nuclear fuel assemblies but below the water level. The feedwater is pumped downward inside the vessel but just outside the reactor core. The feedwater then reverses direction and moves upward through the nuclear core. The feedwater is circulated throughout the reactor core, picking up the heat created by nuclear fission as it passes through the fuel assemblies. As it absorbs heat, the feedwater is boiled creating steam. Since steam occupies a much larger volume than the water, the steam creates pressure. The pressure drives the steam-water mixture through the top of the reactor core and into two stages of moisture separation. The pressure then forces the dry steam into the steam line that carries the steam out of the containment structure and into the turbine building.

9. Once the steam has entered the turbine building through the steam line, it is directed to the main turbine, which is attached to the electrical generator. The pressurized steam turns the turbine, which turns the generator, thereby generating the electricity that petitioner sells to its customers. Steam exhaust from the main steam turbine then directly enters the condenser or indirectly enters the condenser after passing through a low pressure turbine. During a start-up or shutdown of one of the units, and during maintenance activities, a bypass line will isolate the turbines, allowing steam to flow directly to the condenser rather than to the turbines. During the 2001-2005 years this occurred, on average, about 112 hours per year (or about 1.4 percent of the time) at Nine Mile Unit 1 and about 43.5 hours per year (or about 0.5 percent of the time) at Nine Mile Unit 2. In these instances, water is heated to steam and steam is condensed back into water even though there is no electricity being generated.

10. The condenser is a heat exchanger, like a radiator on a car, except instead of air being used as the cooling medium, water is the cooling medium. Cool water is pumped through pipes

and tubes in the condenser where it removes the heat from the steam and condenses the steam back into water. The warm cooling water exiting the condenser is then cooled - either in a cooling tower or some other cooling environment - before it is recirculated through the condenser. The cooling water never touches the steam or feedwater, i.e., it is always separated from the steam and feedwater by the metal tubes through which the water passes.

11. Once the steam passes through the condenser and is condensed into water, it is pumped through filters and demineralizers for purification and additional heat exchangers to remove excess heat. The purified water is pumped back to the boiling water reactor vessel via the feedwater pipes as the cycle repeats. The feedwater and steam are intended to stay within the reactor core, the turbine, and the condenser.

12. Nine Mile also contains multiple systems, known as the engineered safety features (ESF), designed to control reactor fission products and prevent or ameliorate the effects of possible malfunctions in the nuclear process. The ESF systems at Nine Mile include the following containment systems: the core spray system, the containment spray system and hydrogen recombiner. The ESF systems also include the emergency core cooling systems and the fission product removal and control systems.

Ginna

13. Ginna is a single unit plant with a Westinghouse Two Loop Pressurized Water Reactor. Commercial operations at Ginna first began in 1970. Ginna generated approximately 4 billion kilowatt hours of electricity each year from 2001 through 2005.

14. In a pressurized water reactor such as that located at the Ginna facility, the steam is created in steam generators, the heating source for which is not directly nuclear fission, but is instead pressurized water which is super-heated in the reactor vessel. So, with a pressurized

water reactor, the steam and water circulating through the steam generator, the turbines, and the condenser never pass through the reactor vessel.

15. The containment structure at Ginna contains the reactor vessel, two steam generators, two reactor coolant pumps, a pressurizer, and the connecting piping. The cylindrical steel reactor vessel contains a core barrel with the nuclear fuel assemblies. Ginna has 121 fuel assemblies in its reactor core. Each fuel assembly includes 179 fuel rod locations, 16 guide tubes, and one instrument thimble. Normal refueling operations are conducted approximately every 18 months, during which one-third of the fuel assemblies are removed from the core and placed in the spent fuel pool.

16. The coolant water is pressurized and cycled to the reactor vessel by coolant pumps. The coolant water enters the reactor vessel at an inlet nozzle. The shape of the core barrel forces the water to flow downward in the space between the reactor vessel wall and the core barrel to the bottom of the reactor vessel. The coolant water is then directed upward to pass through the fuel assemblies, transferring the nuclear fission-produced heat to the coolant water. The coolant water is kept at a high pressure of 2,235 pounds per square inch, which prohibits the coolant water from becoming steam and allows the coolant water to reach temperatures above those that could be attained at normal pressure. At normal pressure, water will boil and turn to steam at 212 degrees Fahrenheit. Under increased pressure, water in its liquid state can reach temperatures far in excess of 212 degrees, and the pressurized coolant water can reach temperatures in excess of 600 degrees. The super-heated reactor coolant water is directed to the top of the fuel assemblies and out of the reactor vessel through an outlet nozzle.

17. The super-heated coolant water then flows from the reactor to the steam generator. The steam generator is a heat exchanger in which feedwater becomes steam by the absorption of

heat from the super-heated coolant water. This is done by passing the super-heated coolant water through metal tubes in the steam generator. Once it has given off much of its heat, the reactor coolant water leaves the discharge side of the steam generator, goes through coolant pumps and reenters the inlet side of the reactor vessel to repeat the cycle.

18. The feedwater flows around the outside of the steam generator tubes where it picks up heat from the super-heated reactor coolant water. When the feedwater absorbs sufficient heat, it becomes steam. Since steam occupies a much larger volume than the feedwater, pressure is created which forces the water/steam mixture to the top of the steam generator vessel through moisture separators. The pressure also forces the steam to exit the steam generator and continue on to the turbine building.

19. After the steam exits the steam generator, it is piped to the turbine building. Once the steam has entered the turbine building through the steam line, it is directed to the main turbine, which is attached to the electrical generator. The steam pressure turns the turbine, which turns the generator, thereby generating the electricity that petitioner sells to its customers. Steam exhaust from the main steam turbine then directly enters the condenser or indirectly enters the condenser after passing through a low pressure turbine. During a start-up or shutdown of the unit, and during certain maintenance activities, a bypass line will isolate the turbines, allowing steam to flow directly to the condenser rather than to the turbines. During the 2001-2005 years, this occurred, on average, about 105 hours per year (or about 1 percent of the time) at Ginna. In these instances, water is heated to steam and steam is condensed back into water even though there is no electricity being generated.

20. Cooled water is circulated through tubes in the condenser where it removes heat from the steam. Then the water used to cool the steam exits the condenser and is circulated through a cooling environment.

21. In the condenser the steam passes over the tubes containing the cooled water and loses heat, causing the steam to condense into feedwater for the next cycle. Once the water collects inside the main condenser, the water passes through a purification system. The purified water continues through low pressure feedwater heaters to increase its temperature. The feedwater then enters the suction of the main feedwater pumps and passes through a set of high pressure feedwater heaters using extraction steam from the turbines. The heated and pressurized feedwater now reenters the steam generators to begin the cycle again. The feedwater and steam are intended to stay within the steam generator, the turbine, the condenser, and the pipes and pumps interconnecting that equipment.

22. Like Nine Mile, Ginna contains multiple ESF systems designed to control reactor fission products and prevent or ameliorate the effects of possible malfunctions in the nuclear process. The ESF systems at Ginna include the following containment systems: the containment circulation fan cooler, containment post-accident charcoal systems, containment isolation valves, containment spray system and hydrogen recombiners. The ESF systems also include the emergency core cooling system and the safety injection systems and accumulators to maintain barriers to prevent the release of nuclear materials into the environment.

Safety, pollution control and environmental regulation of petitioner's New York plants

23. The nuclear power facilities at Nine Mile and Ginna are licensed and regulated by the Nuclear Regulatory Commission (NRC).

24. Nine Mile Units 1 and 2 were issued their initial operating licenses on December 26, 1974 and July 2, 1987, respectively. These licenses were renewed on October 31, 2006. As part of the license renewal process, the NRC issued a Final Safety Evaluation Report.[1]

25. Ginna was issued its initial Operating License on September 19, 1969, which was renewed on May 19, 2004. As part of the license renewal process, the NRC issued a Final Safety Evaluation Report.

26. As part of the licensing process for each plant, the NRC issued a Generic Environmental Impact Statement (the GEIS) for License Renewal of Nuclear Plants (NUREG-1437). In February 2004, it published Supplement 14, Regarding R.E. Ginna Nuclear Power Plant. In May 2006, it published Supplement 24, Regarding Nine Mile Point Nuclear Station, Units 1 and 2 - Final Report.[2]

27. The GEIS discusses and evaluates the nuclear plant's interactions with the environment and the impact of the plant's operations on the environment both under normal operating conditions and in the event of an accident.

28. Nine Mile Point and Ginna use liquid, gaseous, and solid radioactive waste management systems to collect and process radioactive wastes so that the release of any wastes remain within regulatory limits and radioactive levels are maintained as low as reasonably achievable (ALARA) before they are released to the environment.

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[1] Pursuant to State Administrative Procedure Act (SAPA) § 306(4) official notice is taken of the Final Safety Evaluation Report for Nine Mile Units 1 and 2 as well as the Final Safety Evaluation Report for Ginna (***see*** Finding of Fact 25), both of which are available on the NRC's website.

[2] Official notice is taken of the GEIS and Supplements 14 and 24, which are available at the NRC's website (SAPA § 306[4]).

29. The waste disposal systems meet the design objectives and release limits as set forth in Title 10 of the Code of Federal Regulations (CFR) Part 20 and 10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low As is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Effluents."

30. Before being released into Lake Ontario, any liquid waste must meet the requirements established by New York State for liquid discharges.

Nine Mile Environmental Protection

31. On September 6, 2005, petitioner applied to the Division of Air Resources of the New York State Department of Environmental Conservation (DEC) for tax certification for 18 systems at Nine Mile as air pollution control facilities. The applications included an explanation of the function of each such system and petitioner's opinion as to how each qualified as an air pollution control facility under the Tax Law and Environmental Conservation Law (ECL).

32. Petitioner requested such tax certification with respect to the following equipment and systems installed at Nine Mile Units 1 and 2: Unit 1 and Unit 2 reactor buildings; Unit 1 and Unit 2 ECCS - emergency core spray system; Unit 1 ECCS - auxiliary heat removal emergency cooling system; Unit 2 nuclear reactor building North and South auxiliary structure; Unit 1 and Unit 2 emergency diesel generator systems and structures; Unit 1, Unit 2, and common radiation monitoring systems; Unit 2 gaseous radioactive waste storage and disposal system; and Unit 2 nuclear reactor biological shield wall - primary containment. Petitioner claimed an investment tax credit and employment incentive credit for such equipment and systems based on its belief that the assets were used for air pollution control.

33. The Unit 1 and Unit 2 reactor buildings house the refueling and reactor servicing equipment, new and spent fuel storage facilities, and other reactor auxiliary or service equipment. The major function of these containment structures is to minimize ground-level release of airborne radioactive materials by providing controlled, elevated release of the building atmosphere through a filter system under accident conditions. The reactor building is an outer concrete building that is strong enough to survive such things as crashing jet airliners and the containment structures are necessary to prevent the escape of radiation or radioactive steam in the event of an accident like the one at Three Mile Island.

34. The Unit 1 and Unit 2 emergency core spray systems are part of the emergency core cooling system (ECCS) and are designed to maintain the integrity of the nuclear fuel cladding in order to prevent the release of radionuclides to the environment. The core spray system consists of two redundant and independent core spray systems that cool the core in the event of a loss-of-coolant accident. In addition, the core spray systems perform functions that support fire protection and environmental qualification.

35. The Unit 1 auxiliary heat removal emergency cooling system is also part of the ECCS. It provides for decay heat removal from the reactor fuel in the event that reactor feedwater capability is lost and the main condenser is not available. The removal of the decay heat in this emergency situation ensures the integrity of the fuel cladding and prevents the release of radionuclides to the environment. The emergency cooling system is connected to the reactor and operates by natural circulation. During operation of the emergency cooling loops, steam rises from the reactor vessel to the condenser tubes where it is condensed by boiling the condenser shell water. As the water condenses, it returns by gravity flow to the suction of a reactor recirculating pump and thus to the reactor vessel.

36. The North and South auxiliary structures of the Unit 2 reactor building house the ECCS systems and are integral to the removal of heat from the reactor core to preserve fuel cladding integrity and prevent the release of radionuclides to the environment.

37. The Unit 1 and Unit 2 emergency diesel generator systems and structures provide the standby source of electric power for equipment required during an accident, for safe shutdown, and for maintenance of Nine Mile. The system consists of two independent standby diesel generators and associated subsystems. The structures housing the diesel generator systems are designed to withstand various accident and event scenarios.

38. The radiation monitoring systems (Unit 1, Unit 2, and common systems) measure the level of radioactivity in potentially radioactive effluents and process streams. This allows demonstration of compliance with release levels during normal plant operations by providing gross radiation level monitoring and off-line isotopic analysis of gaseous effluents including halogens and particulates. The systems also initiate valve isolation on the offgas system, containment purge, and liquid waste system if predetermined release rates are exceeded. The initiation of valve isolation reduces the amount of radioactive materials released into the environment.

39. The Unit 2 gaseous waste management systems include the offgas (OFG) system, standby gas treatment system (SGTS), and various building ventilation systems. The offgas system removes noncondensable radioactive gases that accumulate in the main condenser during plant startup and normal operation. The purpose of the SGTS is to limit the release of radioactive gases from the reactor building to the environment within the guidelines of 10 CFR 100 in the event of a loss-of-coolant accident and to maintain negative pressure in the reactor building under accident conditions.

40. The Unit 2 biological shield wall, located around the exterior of the drywell, reduces radiation heating in the drywell concrete wall; reduces activation of, and radiation effects on, materials and equipment in the drywell; and provides limited access to the annular region for periodic shutdown inspection and maintenance.

41. On September 21, 2005, petitioner received a letter from the Division of Air Resources of the DEC rejecting petitioner's application for tax certification for the air pollution control facilities at Nine Mile, and stating, in relevant part:

> According to our records, this facility [Nine Mile] does not have any air permits or Certificates to Operate for any air emission sources at the plant. In addition, this office does not regulate any of the equipment identified in your applications since they are not air pollution control devices regulated by any of DEC's air pollution control regulations. Furthermore, our office does not regulate radiation emissions. Given the above, the Department [DEC] is unable to certify compliance for equipment that we have no regulatory requirements for, and for which air permits are not required.

42. On September 6, 2005, petitioner applied to the Division of Water Resources of the DEC for tax certification of 10 systems at Nine Mile as industrial waste treatment facilities. The applications included an explanation of the function of each such system and petitioner's argument as to how each qualified as an industrial waste treatment facility under the Tax Law and the ECL.

43. Petitioner requested such tax certification with respect to the following equipment and systems installed at Nine Mile Units 1 and 2: Unit 1 and Unit 2 liquid radioactive waste storage and disposal systems; Unit 1 and Unit 2 solid radioactive waste storage and disposal systems; sanitary sewage treatment system and structure; Unit 1 and Unit 2 nuclear radwaste buildings; storm water collection and segregation system; and the Unit 2 cooling tower system. Petitioner

claimed an investment tax credit and employment incentive credit for such equipment and systems based on its belief that the assets were used in the treatment of industrial waste.

44. The Unit 1 and Unit 2 liquid radioactive waste storage and disposal systems (LWS) collect, control, treat, neutralize, store, and remove liquid radioactive waste generated from normal operation and anticipated operational occurrences. The LWS is designed to handle four types of liquid waste: high-conductivity waste; low-conductivity waste; chemical waste; and miscellaneous waste. Discharges to the environment are kept to a practical minimum by the treatment and recycling of much of the waste within the plant, by filtration of much of the waste before discharge, and by the concentration of radiological waste and conversion of the resulting concentrate into solid waste.

45. The Unit 1 and Unit 2 solid waste systems (SWS) hold, monitor, treat, package, and provide temporary storage facilities for radioactive materials prior to shipment offsite and ultimate disposal. The system provides for the dewatering/solidification and packaging of wet solid waste into shipping containers prior to shipment for offsite disposal. The SWS is designed to handle spent resins, filter sludge, and concentrated waste, as well as to provide for collection and shipment of low-level solids.

46. The Unit 1 and Unit 2 radwaste buildings house the radioactive waste storage and disposal systems.

47. Pursuant to the Clean Water Act and authority granted by the U.S. Environmental Protection Agency, New York State granted a State Pollutant Discharge Elimination System (SPDES) Permit for certain wastewater treatment property at Nine Mile. Under its SPDES permit, Nine Mile is permitted to treat and discharge sanitary sewage.

48. As per SPDES Permit No. NY-000-1015, the sanitary sewage and treatment system is permitted to treat 0.0120 millions of gallons per day of sanitary sewage. Treated effluent undergoes chlorination and subsequent dechlorination before being discharged via a 12-inch pipe to a drainage ditch eventually flowing to Lake Ontario. The discharge is permitted as Outfall 030.

49. The storm water collection and segregation system segregates storm water from process wastewater and directs the flow of storm water runoff for discharge from the site. Drainage from the site flows to catch basins and drains that conduct water by way of underground drain pipes and surface drainage ditches to the storm water detention pond on the site. Oil spillage that reaches the detention pond is controlled by placement of a surface boom to restrict discharge of oil from the detention pond, then removed for disposal as necessary.

50. The Unit 2 cooling tower system and circulating water system utilizes a closed-loop circulating water system and a natural draft cooling tower for dissipating heat from the main turbine condenser. The current SPDES Permit No. NY-000-1015 allows a maximum daily discharge temperature of 110°F from Unit 2 and a maximum allowable intake-discharge temperature difference of 30°F.

51. There is no evidence in the record of any response from the DEC Division of Water Resources to petitioner's application for tax certification for industrial waste treatment facilities at Nine Mile.

Ginna Environmental Protection

52. On December 19, 2005, petitioner applied to the Division of Air Resources of the DEC for tax certification for nine systems at Ginna as air pollution control facilities. The

applications included descriptions of each system and petitioner's argument as to how each qualified as an air pollution control facility under the Tax Law and the ECL.

53. Petitioner requested such tax certification with respect to the following equipment and systems installed at Ginna: containment building; reactor vessel; emergency core cooling system (ECCS) - containment spray system; ECCS - safety injection system; radiation monitoring system; and emergency power equipment. Petitioner claimed an investment tax credit and employment incentive credit for such equipment and systems based on its belief that the assets were used for air pollution control.

54. The reactor containment building is an outer concrete building that is strong enough to survive such things as crashing jet airliners. The structure houses and supports safety-related equipment, provides radiation shielding, and provides a barrier against the release of radioactive nuclides. The structure is necessary to prevent the escape of radiation or radioactive steam in the event of an accident like the one at Three Mile Island.

55. The reactor vessel is part of the primary system (also called the reactor coolant system) consisting of the reactor vessel, the steam generators, the reactor coolant pumps, a pressurizer, and the connecting piping. The reactor vessel is one of the barriers to the release of radionuclides to the environment. It also provides support of the internal reactor functions and structural support.

56. The containment spray system is one of the ECCS systems designed to maintain the integrity of the nuclear fuel cladding in order to prevent the release of radionuclides to the environment. Appendix A to the Code of Federal Regulations Part 50 mandates the installation of a system to remove heat from the reactor containment in the case of an accident to maintain acceptably low levels of containment pressure. The containment spray system also contains

components that are part of the Environmental Qualification Program, which is part of the licensing process.

57. The safety injection system is another ECCS system designed to provide cooling in the event of a loss-of-coolant accident caused by ruptures in primary system piping. The ECCS is designed to provide short and long term cooling requirements for the removal of heat from the reactor core to preserve fuel cladding integrity and prevent the release of radionuclides to the environment. The safety injection system is also credited for use in safe shutdown following some fires and contains components that are part of the Environmental Qualification Program.

58. The radiation monitoring system monitors radiation levels of designated systems and areas of the plant, including plant gaseous effluent, during all modes of plant operation, including post-accident monitoring. This system also has a control function that automatically stops or reduces the effluent flow in the event of high levels of radioactive nuclides in the gaseous stream.

59. The emergency diesel generator system provides a reliable, redundant electric power source for safety-related components when the preferred power supply is not available. The system maintains the integrity of the fuel rod cladding within the reactor, in the event of an accident, which ultimately prevents the release of radionuclides to the environment.

60. Petitioner received a letter dated January 4, 2006, from the Division of Air Resources of the DEC denying petitioner's application for tax certification. The letter explained the basis of the denial, in relevant part, as follows:

> Unfortunately, I am not able to provide you with the certificates you asked for. Historically, tax certificates have only been provided where actual air pollution control equipment is utilized. Since none of these nine systems fall into this category, I cannot approve them.

61. On December 19, 2005, petitioner applied to the Division of Water Resources of the DEC for tax certification of eight systems at Ginna as industrial waste treatment facilities. The applications included descriptions of each system and petitioner's argument as to how each qualified as an industrial waste treatment facility under the Tax Law and the ECL.

62. Petitioner requested such tax certification with respect to the following equipment and systems installed at Ginna: wastewater collection and treatment system; liquid radioactive waste storage and disposal; radioactive solid waste storage and disposal system; sanitary sewage treatment system and structure; oil spill collection systems - secondary containment; nuclear radwaste building; storm water collection and segregation system; and the steam generator blowdown system. Petitioner claimed an investment tax credit and employment incentive credit for such equipment and systems based on its belief that the assets were used in the treatment of industrial waste.

63. Radioactive liquid wastes are treated in the wastewater collection and treatment system and the liquid radioactive waste storage and disposal system. Radioactive fluids entering the waste disposal system are collected in sumps and tanks until a determination regarding subsequent treatment can be made. The waste is then processed and released under controlled conditions to preclude releases in excess of the limits of 10 CFR Part 20 and to maintain radioactive discharges to ALARA levels according to the requirements of 10 CFR Part 50, Appendix I.

64. The radioactive solid waste storage and disposal system is designed to package solid waste in standard liners and other approved packages for removal to burial or processing facilities. In addition to dry active waste, solid waste produced at Ginna includes sludge, oily waste, bead resin, and filters.

65. The sanitary sewage treatment system and structure collects and discharges wastewater into the treatment system operated by the town of Ontario for the treatment, neutralization or stabilization of industrial waste and other wastes generated through normal process operations at Ginna. New York State granted a SPDES permit (No. NY-000-0493) for certain wastewater treatment property at Ginna. Under its SPDES permit, Ginna is permitted to treat and discharge sanitary sewage.

66. The oil spill collection systems (secondary containment) contain any oil or other spills for inspection and treatment prior to release as required by the Code of Federal Regulations, Containment/Diversionary Structures (40 CFR 112.7[c]). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs.

67. The nuclear radwaste building houses the radwaste systems that are used to treat and store the radioactive materials created in the steam generation process.

68. The storm water collection and segregation system separates storm water from process wastewater and directs the flow of storm water runoff for discharge from the site. Drainage from the site flows to catch basins and drains that conduct water by way of underground drain pipes and surface drainage ditches to the storm water detention pond on the site. Any oil spillage that reaches the detention pond is separated and removed for disposal as necessary.

69. The steam generator blowdown system helps to control the chemistry in the steam generator. The steam generator blowdown system extracts wastewater from both the hot leg and the cold leg of the steam generators and routes the wastewater to the secondary chemical control system for wastewater processing.

70. Petitioner received a letter dated January 18, 2006 from the Division of Water Resources of the NYSDEC that rejected petitioner's application for tax certification, stating:

> We received your applications for eight systems at [Ginna]. Unfortunately, I am not able to provide you with all the certificates you asked for. Article 17-0705 and 17-0707 [of the Environmental Conservation Law (ECL)] only refer to industrial waste treatment facilities constructed in order to comply with ECL and authorized by SPDES permit. NRC regulates 10 CFR Part 20 and 10 CFR Part 50 Appendix I facilities.
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> Item 2 Wastewater Collection and Treatment appears in part to be Outfall 001B. Item 3 Sanitary Sewage is covered as pretreatment. Item 4 is in part Outfall 001C. Item 5 Stormwater Detention Pond is Outfall 005, but is not followed by an oil water separator. Item 8 Steam Generator Blowdown is Outfall 001B. 6 NYCRR 655 excludes collection systems including pumping and transmitting facilities preceding the point of treatment, neutralization, or stabilization. Tax Certification is for the amount of increased property value.
>
> Tax certificates will be considered for resubmitted applications for Outfall 001B, sanitary sewage and Outfall 001C.

71. Petitioner did not submit any further applications to DEC for certification.

Petitioner files its claims for credits

72. On September 12, 2005, petitioner timely filed Form CT-8, Claim for Credit or Refund of Corporation Tax Paid, for the tax period ended December 31, 2001, requesting a refund of corporation franchise tax in the amount of $22,534,495.00. The reason for the claim was stated as "Taxpayer was eligible for the refundable Investment Tax Credit."

73. On September 11, 2006, petitioner timely filed Form CT-8, Claim for Credit or Refund of Corporation Tax Paid, for the tax period ended December 31, 2002, requesting a refund of corporation franchise tax in the amount of $3,379,880.00. The reason for the claim was stated as "Taxpayer was eligible for the refundable Investment Tax Credit, the Employment Incentive Credit and the Industrial or Manufacturing Business Credit."

74. On September 11, 2006, petitioner also timely filed Form CT-8, Claim for Credit or Refund of Corporation Tax Paid, for the tax period ended December 31, 2003, requesting a refund of corporation franchise tax in the amount of $4,027,845.00. The reason for the claim was stated as "Taxpayer was eligible for the refundable Investment Tax Credit, the Employment Incentive Credit and the Industrial or Manufacturing Business Credit."

75. On September 11, 2006, petitioner also timely filed Form CT-8, Claim for Credit or Refund of Corporation Tax Paid, for the tax period ended December 31, 2004, requesting a refund of corporation franchise tax in the amount of $18,347,236.00. The reason for the claim was stated as "Taxpayer was eligible for the refundable Investment Tax Credit, the Employment Incentive Credit and the Industrial or Manufacturing Business Credit."

76. On September 2, 2009, petitioner timely filed an amended Form CT-3, General Business Corporation Franchise Tax Return, for the tax period ended December 31, 2005, in which petitioner claimed a refund of corporation franchise tax in the amount of $3,317,730.00.

77. Petitioner claimed investment tax credits (ITC) and employment incentive credits (EIC) for the following equipment at Unit 1 and Unit 2 of Nine Mile based on its belief that the assets were principally used in the production of goods by manufacturing or processing: (1) the containment structure and all of the equipment within that structure (including safety features) used to circulate the feedwater through the reactor vessel, boil the water into steam and then to direct the steam out of the containment structure to the turbine building; (2) the steam lines connecting the turbines to the condenser; (3) the equipment, including the condenser and heat exchangers, used to condense the steam into feedwater and return the feedwater back to the reactor vessel; and (4) nuclear fuel and fuel assemblies. These assets, with the exception of certain equipment determined not to be potentially eligible for credits by agreement between

petitioner and the Division of Taxation (Division) and therefore no longer included in the claims at issue, were used to create steam from water or water from steam. The steam thus created was generally used to turn turbines attached to a generator thereby generating electricity to be sold. No credits were claimed for the equipment in the turbine building, the electrical generator, or the equipment connecting the turbines to the generator.

78. All of the assets that comprise the manufacturing portions of petitioner's claims for investment tax credit, employment incentive credit and industrial or manufacturing business credit at Nine Mile are necessary for the operation of a nuclear power plant that sells only electricity.

79. As stated in Finding of Fact 43, petitioner claimed an ITC and EIC for certain equipment and systems installed at Nine Mile Units 1 and 2 based on its belief that the assets were used in the treatment of industrial waste.

80. As stated in Finding of Fact 32, petitioner claimed an ITC and EIC for certain equipment and systems installed at Nine Mile Units 1 and 2 based on its belief that the assets were used for air pollution control.

81. Petitioner claimed an ITC and EIC for the following equipment at Ginna based on its belief that the assets were principally used in the production of goods by manufacturing or processing: (1) the containment structure and all of the equipment within that structure (including safety features) used to pressurize and heat the coolant water, pump the coolant water through the steam generator and then to direct the steam out of the containment structure to the turbine building; (2) the steam lines connecting the turbines to the condenser; and (3) the equipment, including the condenser and heat exchangers, used to condense the steam into feedwater and return the feedwater back to the reactor vessel. These assets, with the exception of certain

equipment determined not to be potentially eligible for credits by agreement between petitioner and the Division (and therefore no longer included in the claims at issue), were used to create steam from water or water from steam. The steam thus created was generally used to turn turbines attached to a generator thereby generating electricity to be sold. No credits were claimed for the equipment in the turbine building, the electrical generator, or the equipment connecting the turbines to the generator.

82. All of the assets that comprise the manufacturing portions of petitioner's claims for investment tax credit, employment incentive credit and industrial or manufacturing business credit at Ginna are necessary for the operation of a nuclear power plant that sells only electricity.

83. As stated in Finding of Fact 62, petitioner claimed an ITC and EIC for certain equipment and systems installed at Ginna based on its belief that the assets were used in the treatment of industrial waste.

84. As stated in Finding of Fact 53, petitioner claimed an ITC and EIC for certain equipment and systems installed at Ginna based on its belief that the assets were used for air pollution control.

The Division denies the claims; an administrative challenge ensues

85. The claims for refund for the periods ended December 31, 2001 through 2004 were denied by the Division by letter dated March 8, 2007.

86. Following a timely-filed Request for Conciliation Conference and the resulting conference, the Bureau of Conciliation and Mediation Services issued an Order dated December 18, 2009 sustaining the Division's denial of the credits.

87. On or before March 18, 2010, petitioner timely filed its petition in this matter with the Division of Tax Appeals.

The parties agree on the numbers if the credits are ultimately allowed

88. If it is determined that petitioner's assets do not qualify for the investment tax credit pursuant to Tax Law § 210(12)(b)(i)(A) or (B), the portions of the refunds and carryforwards attributable to investment tax credits and employment incentive credits should be denied in full.

89. If it is determined that petitioner is not engaged in an industrial or manufacturing business pursuant to Tax Law § 14-a, the portion of the refunds attributable to industrial or manufacturing business credit (IMB) should be denied in full.

90. If, as petitioner asserts, investment tax credits and employment incentive credits are permitted under the respective statutory provisions there would be a recapture of a portion of the credits as a consequence of a sale of certain of petitioner's ownership interests. Specifically, the parties agree that a total of 39.63 percent of the credits allowed on 5-year and 15-year property would be subject to ratable recapture pursuant to Tax Law § 210(12)(g) as a result of the sale of a 39.63 percent interest in petitioner in October 2009.

91. The tables and other information in Findings of Fact 92 through 97 reflect the credits and carryovers that would be permitted under the various scenarios indicated.

92. If it is determined that the only qualifying assets herein are those petitioner asserts as ITC and EIC-eligible on the basis that such assets are principally used in the production of goods by manufacturing or processing pursuant to Tax Law § 210(12)(b)(i)(A) and (ii)(A), then a refund of $41,085,297.00 is due, plus statutory interest, and EIC carryforward of $17,093,264.00 is due, computed in accordance with the following Table MFG:

MFG	2001	2002	2003	2004	2005	Total
ITC Credit earned after recapture	17,509,389	2,767,385	1,584,452	12,880,007	3,104,730	

EIC Credit earned after recapture	0	8,996,507	10,166,300	1,169,792	0	
ITC used	55,872	0	0	0	0	
EIC used	0	334,970	1,432,802	331,781	1,139,781	
Tax due after credits	1,500	167,485	915,239	283,803	550,064	
Tax previously paid	57,372	502,455	2,348,041	615,584	1,689,845	
Overpayment (Interest bearing)	55,872	334,970	1,432,802	331,781	1,139,781	3,295,206
ITC Credit that is refundable	17,453,517	2,767,385	1,584,452	12,880,007	3,104,730	37,790,091
Net refund	17,509,389	3,102,355	3,017,254	13,211,788	4,244,511	41,085,297
EIC Credit Carryforward to next period	0	8,661,536	17,395,034	18,233,045	17,093,264	17,093,264

93. If it is determined that the only qualifying assets herein are those petitioner asserts as ITC and EIC-eligible on the basis that such assets are industrial waste treatment facilities and air pollution control facilities, used in petitioner's trade or business, pursuant to Tax Law § 210(12)(b)(i)(B), (ii)(C), and (ii)(D), then a refund of $11,169,881.00 is due, plus statutory interest, and EIC carryforward of $3,282,412.00 is due, computed in accordance with the following Table PC:

PC	2001	2002	2003	2004	2005	Total
ITC Credit earned after recapture	6,401,703	0	0	1,528,843	0	
EIC Credit earned after recapture	0	3,260,873	3,260,873	0	0	
ITC used	55,872	0	0	0	0	
EIC used	0	334,970	1,432,802	331,781	1,139,781	

Tax due after credits	1,500	167,485	915,239	283,803	550,064	
Tax previously paid	57,372	502,455	2,348,041	615,584	1,689,845	
Overpayment (Interest bearing)	55,872	334,970	1,432,802	331,781	1,139,781	3,295,206
ITC Credit that is refundable	6,345,832	0	0	1,528,843	0	7,874,675
Net refund	6,401,704	334,970	1,432,802	1,860,624	1,139,781	11,169,881
EIC Credit Carryforward to next period	0	2,925,903	4,753,974	4,422,193	3,282,412	3,282,412

94. If it is determined that the only qualifying assets herein are those petitioner asserts as ITC and EIC-eligible on the basis that such assets are industrial waste treatment facilities used in petitioner's trade or business, pursuant to Tax Law § 210(12)(b)(i)(B) and (ii)(C) do so qualify, then 26 percent of the total PC investment tax credit and employment incentive credit is due, constituting a refund of $3,757,596.00, plus statutory interest.

95. If it is determined that the only qualifying assets herein are those petitioner asserts as ITC and EIC-eligible on the basis that such assets are air pollution control facilities used in petitioner's trade or business, pursuant to Tax Law § 210(12)(b)(i)(B) and (ii)(D), then a refund of 74 percent of the total PC investment tax credit and employment incentive credit is due, constituting a net refund of $9,107,938.00, plus statutory interest, and EIC carryforward of $1,586,758.00.

96. If it is determined that the assets asserted to qualify for the ITC and the EIC herein on the basis that such assets are principally used in the production of goods by manufacturing or processing pursuant to Tax Law § 210(12)(b)(i)(A) and (ii)(A) do so qualify, and if it is

determined that the assets asserted to qualify for the ITC and the EIC on the basis that such assets are industrial waste treatment facilities[3] used in petitioner's trade or business pursuant to Tax Law § 210(12)(b)(i)(B) also qualify, then a refund of $41,163,727 is due, plus statutory interest, and EIC carryforward of $17,133,284 is due, computed in accordance with the following Table MFG/PC:

MFG/PC	2001	2002	2003	2004	2005	Total
ITC Credit earned after recapture	17,509,389	2,767,385	1,584,452	12,958,437	3,104,730	
EIC credit earned after recapture	0	8,996,507	10,166,300	1,169,792	0	
ITC used	55,872	0	0	0	0	
EIC used	0	334,970	1,432,802	331,781	1,139,781	
Tax due after credits	1,500	167,485	915,239	283,803	550,064	
Tax previously paid	57,372	502,455	2,348,041	615,584	1,689,845	
Overpayment (Interest bearing)	55,872	334,970	1,432,802	331,781	1,139,781	3,295,206
ITC Credit that is refundable	17,453,517	2,767,385	1,584,452	12,958,437	3,104,730	37,868,521
Net refund	17,509,389	3,102,355	3,017,254	13,290,218	4,244,511	41,163,727
EIC Credit Carryforward to next period	0	8,661,536	17,395,034	18,273,065	17,133,284	17,133,284

[3] All equipment claimed as eligible for the investment tax credit and employment incentive credit on the basis that such assets are air pollution control facilities was also claimed as eligible for the credits on the basis that such assets were principally used in the production of goods by manufacturing or processing. Only certain equipment at Ginna for the 2004 tax year was claimed as eligible for credits solely on the basis that such assets were industrial waste treatment facilities. This is why the credits shown as available on Table MFG/PC do not reflect any air pollution control facilities, and the sum of the credits shown as available on Table MFG and Table PC is greater than the credits shown as available on Table MFG/PC.

97. If it is determined that petitioner is engaged in an industrial or manufacturing business pursuant to Tax Law § 14-a, a refund of $70,950.00 is due, computed in accordance with the following Table IMB:

IMB	2001	2002	2003	2004	2005	Total
IMB Credit Earned	0	32,748	21,806	16,396	0	70,950
Refundable IMB Credit that is allowed	0	32,748	21,806	16,396	0	70,950

98. The Division does not dispute that petitioner was a "new business" as that term is used in Tax Law § 210(12)(j).

99. The assets - the cost or federal income tax basis of which form the credit base of the Investment Tax Credit and the Employment Incentive Credit - were: (a) property subject to depreciation under Internal Revenue Code § 167; (b) depreciable over a period of four years or more; (c) acquired by "purchase" as that term is defined in Internal Revenue Code § 179(d); and (d) had a situs in New York at all times relevant to this case.

100. Petitioner maintained the increased employment levels required for it to receive the full amount of the Employment Incentive Credit.

Proposed findings of fact

101. Petitioner's proposed findings of fact numbered 1 through 94 are accepted and are set forth above, except with respect to numbering and except that proposed findings of fact 5, 30, 39, 41, 49, 51, 58, 60, and 68 have been modified to better reflect the record.

102. The Division's proposed findings of fact numbered 1 through 51 are accepted and are included, in substance, in the Findings of Fact herein.

SUMMARY OF THE PARTIES' POSITIONS

103. Petitioner contends that the assets with respect to which it claims an investment tax credit and employment incentive credit on the basis that such assets were principally engaged in the production of goods by manufacturing or processing were principally engaged in the production of steam from water and water from steam. Petitioner further contends that steam and water qualify as goods and that the conversion of water into steam and steam into water under the conditions herein qualifies as manufacturing for ITC purposes.

104. Petitioner also contends that the assets claimed to be industrial waste and air pollution control facilities qualify for the ITC and EIC available pursuant to Tax Law § 210(12)(b)(i)(B). Petitioner asserts that such assets meet the definition of industrial waste treatment facilities and air pollution control facilities under Tax Law § 210(12)(b)(ii)(C) and (D). Petitioner further argues that, its lack of DEC certification notwithstanding, it has satisfied the intent and purpose of the requirement that industrial waste and air pollution control facilities be in compliance with New York's environmental, public health and safety laws to qualify for credit. Petitioner contends that the facilities were denied certification because they are not regulated by DEC and that the certification provision discriminates against entities outside DEC's jurisdiction and thereby creates an unconstitutional classification on its face. Finally, petitioner asserts that the NRC's standards for nuclear facilities are equivalent to or more stringent than those imposed by DEC.

105. With respect to the industrial or manufacturing business credit claim, petitioner contends that it was such a business, and therefore entitled to the credit, because it was principally engaged in the production of goods by manufacturing. Specifically, petitioner

contends that it was principally engaged in the production of steam from water and water from steam.

106. The Division takes the position that the assets on which petitioner claims the ITC and EIC as property principally engaged in the production of goods were engaged in the generation of electricity, and, as electricity is not a "good" for ITC purposes, petitioner's claims must fail. The Division also contends that steam and water are not goods for ITC purposes and that the processes of heating water and cooling steam as described herein do not qualify as manufacturing under Tax Law § 210(12)(b)(ii)(A).

107. The Division contends that petitioner's claims for the ITC and EIC on the assets claimed to be industrial waste and air pollution control facilities must fail because petitioner did not receive any certifications from DEC with respect to those assets as required under Tax Law § 210(12)(b)(ii)(A). The Division further asserts that petitioner has not proven that its assets otherwise qualify as industrial waste treatment or air pollution control facilities under the statute.

108. Finally, the Division contends that petitioner is not entitled to the claimed IMB credit because, as relevant herein, such credit is restricted to businesses engaged in the production of goods and petitioner was principally engaged in the production of electricity, a non-good by statutory definition.

CONCLUSIONS OF LAW

A. Petitioner has the burden of showing a "clear-cut entitlement" to the various investment tax credits, employment incentive credits and industrial or manufacturing business credits it claims in the present matter (***see Matter of Golub Service Station v. Tax Appeals Tribunal*** 181 AD2d 216, 585 NYS2d 864 [3d Dept 1992]). Indeed, petitioner must show that its interpretation of the relevant law is the only reasonable interpretation (***see Matter of Brooklyn***

Navy Yard Cogeneration Partners, L.P., Tax Appeals Tribunal, May 9, 2006, ***confirmed*** 46 AD3d 1247, 848 NYS2d 747 [3d Dept 2007], ***lv denied*** 10 NY3d 706, 858 NYS2d 654 [2008]). While tax credit statutes are thus properly construed strictly against petitioner, such construction should not be so narrow as to defeat the provision's settled purpose (***see Matter of Grace v. New York State Tax Commn.***, 37 NY2d 193, 371 NYS2d 715 [1975]).

ITC for Property Principally Used in the Production of Goods

B. Tax Law § 210(12)(b)(i)(A) allows for an investment tax credit against the tax imposed by Article 9-A of the Tax Law for investments in tangible personal property or other tangible property that meets various criteria not at issue in this matter (***see*** Finding of Fact 99) and, as relevant herein, is "principally used" by the taxpayer in the production of "goods" by manufacturing. "Principally used" means more than 50 percent (20 NYCRR 5-2.4[c]).

C. While interpretive case law has defined "goods" for ITC purposes as "tangible personal property having intrinsic value that is capable of being owned, bought and sold" (***Matter of Clark***, Tax Appeals Tribunal, September 14, 1992; ***see also Matter of Leisure Vue, Inc. v. Commissioner of Taxation and Finance***, 172 AD2d 872, 568 NYS2d 175, 176 [3d Dept 1991]), the statute defines this term only to the extent of excluding electricity from its meaning: "For purposes of this subdivision, the term 'goods' shall not include electricity" (Tax Law § 210[12][b][i]). This sentence was added by Laws of 1993 (ch 57) for the purpose of "eliminat[ing] the applicability of investment tax credits to property used in the generation of electricity" (Bill Jacket, Memorandum in Support, L 1993, ch 57, p. 25).

D. Given the exclusion of electricity from the definition of goods, the first issue to be resolved with respect to the ITC claims is whether the subject assets are principally used in the production of steam from water and water from steam as petitioner contends, or in the production

of electricity as the Division contends. Considering that the turbines and generators are unquestionably engaged in the production of electricity, the specific issue becomes whether petitioner's electrical production process includes the subject assets. If the assets are principally used in the production of electricity, then they are not qualified property and the ITC claims must fail.

E. To determine whether property qualifies as production property for the investment tax credit it is necessary to examine "the relationship of the individual components of equipment to the primary function with which the equipment is involved, in order to determine the classification of the component pieces of equipment" (***Matter of Brooklyn Union Gas Company***, Tax Appeals Tribunal, March 8, 2012). Under this standard, the test is not simply an analysis of the subject equipment in isolation, but also the context in which it is used, i.e., "the primary function with which the equipment is involved." In ***Brooklyn Union Gas***, the Tribunal found that a local natural gas distributor's system of 11,000 miles of pipes and mains, regulators, heaters, purification equipment, and odorizers was "primarily and harmoniously involved in the transportation of gas" to customers.

In the present matter, the subject assets create heat by nuclear fission that creates steam that flows through and thereby turns turbines that turn generators that ultimately produce electricity that petitioner sells to customers (***see*** Findings of Fact 6-9, 14-19, 77 and 81). Steam exhaust from the turbines flows through the condensers for conversion back into water to be used again as feedwater as the cycle repeats (***see*** Findings of Fact 10, 11, 20, and 21). The subject assets along with the turbines and generators thus comprise an integrated and continuous system that must operate in a synchronized and harmonious manner for electrical production to occur. Petitioner's power plants could not function without the subject assets. The only purpose, much

less "primary function," of this system is the production of electricity (***see*** Finding of Fact 5) and the subject assets are as essential to such production as the turbines and generators (***see*** Findings of Fact 78 and 82). Furthermore, as designed, it appears that there could be no other user for the steam-generating assets and no other use for the condensation assets.[4] Accordingly, consistent with the statutory language and intent of Tax Law § 210(12)(b)(i), it is concluded that the subject assets were principally used in the production of electricity and were thus not qualified property for ITC purposes.

F. Contrary to petitioner's contention, the Tribunal's decision in ***Brooklyn Union Gas*** did not use a "compartmentalized" approach to simply "determine the primary function of each piece of equipment or asset class." Rather, the Tribunal examined such equipment in relation to the system as a whole and concluded that, considering the predominance of the pipes and mains that were engaged in the delivery of gas to customers, the "system was one of distribution and delivery channels, which necessitated certain appurtenant operations in order to function properly and effectively." The Tribunal noted that while the appurtenant functions did make limited modifications to the natural gas, such modifications were the "result of, and pertain intimately and almost entirely to, the transportation and delivery of the product."

Here, the subject assets obviously generate steam from water and condense water from steam. These processes, however, "pertain intimately and almost entirely" to the production of

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[4] Petitioner asserts that it could have sold the excess steam produced when the turbines were shut down and no electricity was being produced. There is no evidence that petitioner had the necessary infrastructure or equipment (much less regulatory authority) to transport steam off-site or that an infrastructure existed to receive such steam (***see*** www.coned.com/steam/steam_service.asp [referencing Consolidated Edison's New York City steam service as cited in petitioner's reply brief]). The fact that petitioner lacked the capability to sell the steam or water and could use the steam and water only in connection with the production of electricity reinforces the finding that these assets are part of the system of electrical production.

electricity (***see Matter of Brooklyn Union Gas***). As a consequence, it is reasonable to conclude they are engaged in the production of electricity for ITC purposes.

G. Citing ***Brooklyn Union Gas***, petitioner contends that the higher value of the subject assets as compared with petitioner's other power plant assets supports a finding that the subject assets are engaged in steam generation and condensation and not electrical production.[5] In ***Brooklyn Union Gas***, the Tribunal noted that "as measured in terms of both size and cost" the assets at issue in that case were "predominantly comprised of petitioners' distribution infrastructure structure of pipes and mains." The emphasis on the cost and size of the investment in pipes and mains in ***Brooklyn Union Gas*** demonstrated that that investment in that case was mostly for assets uncontestedly engaged in natural gas distribution. The Tribunal made this observation in the course of their examination of the assets in context (***see*** Conclusion of Law E). Here, by contrast, and as discussed, the subject assets were an integral part of the system of electrical production. The cost of those assets has no bearing on whether or not they should be considered part of that system.

H. To counter the argument that the subject assets were so integrated with the turbines and generators so as to constitute a single system of electrical production, petitioner notes that all of the assets at its power plants could be segregated by their individual function and in fact were so segregated for purposes of calculating the potentially available credit amounts herein (***see*** Findings of Fact 92 and 96). Petitioner contends that this supports a finding that steam

[5] In support of this contention petitioner quotes a sentence from the administrative law judge determination in ***Matter of Brooklyn Union Gas***, erroneously attributing that quote to the Tribunal's decision. In accordance with Tax Law § 2010(5), this determination does not cite the quoted sentence.

generation, electrical generation and condensation at petitioner's plants are properly construed as separate production processes.

This contention is rejected. The fact that the specific functions of particular assets can be identified does not mean that the context in which the assets are used should be ignored. Obviously the subject assets create steam and condense that steam into water as described herein, but they do so in a particular context, that is, as previously discussed, a larger system of electrical production in which they play an essential role.

I. A contexual approach similar to that utilized by the Tribunal in ***Brooklyn Union Gas*** has long been the standard mode of analysis in cases involving sales tax production exemptions where the exemption statute (Tax Law § 1115[a][12]) contains language similar to the ITC under Tax Law § 210(12)(b).[6] Given the similarity of language, interpretive case law addressing ITC production property issues have looked to cases or regulations involving the sales tax production exemption for guidance (***see e.g. Matter of Brigar v. Chu***, 105 AD2d 587, 481 NYS2d 526 [3d Dept 1984], ***Matter of Hand Assembly and Packaging, Inc.***, Tax Appeals Tribunal, August 30, 1990, ***Matter of Brooklyn Union Gas Company***).

Indeed, the Tribunal's decision in ***Matter of Brooklyn Union Gas*** relied, in part, on its decision in ***Matter of B.R. DeWitt*** (Tax Appeals Tribunal, September 19, 1991), where mixer trucks were determined to qualify for the sales tax production exemption. In that case, the Tribunal demonstrated the contextual approach by examining the "entire use of the mixer trucks" because "it is the relationship of the transportation equipment to the production process that determines whether the equipment is exempt, not simply its nature as transportation equipment."

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[6] Specifically, Tax Law § 1115(a)(12) provides an exemption from sales tax for purchases of "[m]achinery or equipment for use or consumption directly and predominantly in the production of [various items] for sale by manufacturing . . . ."

Similarly, in the present matter, it is the relationship of the steam generating and condenser assets to the overall electrical production process, and not simply the nature or function of these assets in isolation, that is determinative.

J. Also supportive of the Division's position in the present matter is ***Matter of Niagara Mohawk Power Corp. v. Wanamaker*** (286 App Div 446, 144 NYS2d 458 [4th Dept. 1955], ***affd*** 2 NY2d 764, 157 NYS2d 972 [1956]), a case involving a local (Erie County) sales tax production exemption containing, to the extent relevant, language similar to Tax Law § 1115(a)(12) and cited with approval in ***Matter of B.R. DeWitt***.

In ***Niagara Mohawk***, the court referred to its contextual approach as a "practical construction" of the production exemption statute (144 NYS2d at 461). That case is a strong analog to the present matter because it involved whether equipment used at a steam turbine electricity generation plant was used in the production of electricity. The plant burned coal in a boiler the steam from which operated a turbine and generator. The equipment at issue was various coal and ash handling equipment used to bring the coal to the boiler and remove the ash and slag from the boiler after burning. In contrast to the present matter, the coal and the boiler, equipment functionally analogous to the assets at issue, was conceded as qualifying for the exemption. In reaching its conclusion, the court stated:

> There is no simple test of what constitutes "consumption directly and exclusively in the production" of electricity. The basic questions are the following: (1) Is the disputed item necessary to production? (2) How close, physically and causally, is the item to the finished product? (3) Does the disputed item operate harmoniously with the admittedly exempt machinery to make an integrated and synchronized system?
>
> After much study of the matter, we have concluded that the purchase or use of the coal and ash handling equipment is not taxable. That equipment is as essential to production as the generator itself. A serious breakdown in it would quickly stop or impair the output of electricity. We are further impressed with the

> synchronization and integration of the boiler and coal and ash equipment. The one could not operate without the other. Working together they make up a system which supplies the power from which electricity is produced.
>
> A taxing statute should receive a practical construction [citation omitted]. That is particularly true here, for the resolutions are designed to achieve a practical, economic result–avoidance of multiple taxation, at least to some extent. It is not practical to divide a generating plant into "distinct" stages. It was not built that way, and it does not operate that way. The words "directly and exclusively" should not be construed to require the division into theoretically distinct stages of what is in fact continuous and indivisible" (***Matter of Niagara Mohawk Power Corp. v. Wanamaker***, 144 NYS2d, at 461-462).

Application of the ***Niagara Mohawk*** court's line of reasoning to the present matter strongly supports a finding that the subject assets were principally used in the production of electricity. As with the equipment in ***Niagara Mohawk***, the subject assets are as essential to the production of electricity as the turbines and generators. Indeed, the assets at issue in the present matter are closer to the final output of the production system than the equipment in ***Niagara Mohawk***. There, the equipment at issue conveyed the heat source (coal) to the boiler and removed spent fuel from the boiler, while the boiler and the heat source were conceded to be part of the production process. Here, the equipment at issue *is* the boiler and the heat source (the reactor). The assets in the present matter thus present a substantially stronger case for inclusion in the electricity production process than did the equipment in ***Niagara Mohawk***. Moreover, and contrary to the court's reasoning in ***Niagara Mohawk***, petitioner's efforts to divide the production system in the present matter into "theoretically distinct stages" of steam production, condensation and electricity production is "not practical" as the system "does not operate that way" (***id***.). The record shows that petitioner's integrated system of steam creation from the nuclear heat source, steam flow through turbines, turbines turning generators, and steam

condensed to recycle through the system is a "continuous and indivisible" system of electrical production, with every part necessary for such production to occur (144 NYS2d at 462).

K. That the integrated operation of the assets at issue with the turbines and generators produce one product further supports the conclusion that all of the equipment that is part of this system is engaged in the production of that product. The identity of the final product of a production process is essential to identifying property principally used in the process of producing that product (***see Matter of Hand Assembly and Packaging, Inc.***, Tax Appeals Tribunal, August 30, 1990 ["The crux of the matter is determining what is the final product, i.e., the goods, produced by the manufacturing and assembly process."]).

L. Consistent with the Tribunal's reasoning in ***Brooklyn Union Gas***, the Division's regulations also support looking at the relationship of the property at issue with other property to determine if it is part of a system of production. Specifically, the term "property used in the production of goods" is defined in the regulations to include property principally used in the repair or service of production property, all facilities used in the "production operation" including storage of raw materials and finished goods, as well as property used to transport goods during the manufacturing process (***see*** 20 NYCRR 5-2.4[b]). The regulation thus supports a contextual approach to the question, similar to the Tribunal's analysis in ***Brooklyn Union Gas***, and broader than petitioner's analysis that focuses on the use of the equipment isolated from the other equipment with which it is so closely integrated.

M. Petitioner contends that its position in this matter finds support in administrative decisions where property was determined to be production property for ITC purposes, notwithstanding that the final output of the production system differed from the service or product sold by the taxpayer. In support of this position petitioner cites ***Matter of Mitnick*** (Tax

Appeals Tribunal, January 25, 1991), where the ITC production credit was granted for X-ray equipment used in a medical practice, and ***Matter of Plattekill Mountain Ski Center*** (State Tax Commission, August 1, 1985), where ITC production credit was granted to a ski resort for snow-making equipment.[7]

Tax Law § 210(12)(b)(i)(A) does not require that property be used in the production of goods *for sale* in order to qualify for the credit (***compare*** Tax Law § 1115[a][12] [sales tax production exemption does have a "for sale" requirement]). Hence, a distinction between production output and product or service sold is of little significance. More to the point, and contrary to petitioner's position herein, neither of the cited cases draws a line within a system of production in determining whether property qualifies for the ITC production credit. The steam generating assets are not denied the credit in the present matter because petitioner sells electricity; they are denied the credit because, as discussed, they are an integral part of a system of electrical production. The line petitioner would draw between steam and electrical generation is plainly not justified by the facts. The above-cited cases thus do not support petitioner's position and are, in fact, consistent with Conclusion of Law E.

N. Petitioner also contends that the fact that the assets operate for a brief period of time when the power plants are not producing electricity supports a finding that their principal use must be steam or water production. I fail to see the logic of this proposition. The subject assets operate without producing electricity for about one percent of their operating time during periods of start-up, shutdown and maintenance (***see*** Findings of Fact 9 and 19). This specific use of the

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[7] Petitioner also cited an advisory opinion, ***United Welding Supply*** (TSB-A-93[20]C) on this point. There was no distinction in that case, however, between the production output and the product sold. Specifically, in that case, the ITC was granted for equipment that converted liquid cryogens into vapor that was then put into high pressure cylinders for shipment to customers.

assets is clearly intended to support the safe operation of the facility and is therefore properly considered part of the electrical production process (***see*** NYCRR 5-2.4[b]). However, even if this use was not part of electrical production, the fact remains that, as discussed previously, the subject assets were engaged in the process of electrical production for about 99 percent of their operating time and, as noted, "principally used" means more than 50 percent (20 NYCRR 5-2.4[c]). The fact that the total use of the assets may exceed their use in the process of electrical production does not negate the reality that the assets were, as discussed, an integral and essential part of a synchronized and continuous system of electrical production for 99 percent of their operating time.

O. Petitioner further asserts that "the nuclear reactor plays no direct role in the production of electricity," noting that the reactors are located in separate containment units, connected to the electricity-generating turbines only by the pipes used to transport the steam and the feedwater. With respect to this point, I first note that the term "direct role" does not appear in the ITC statute (***see*** Tax Law § 210.12[b]), although it is part of the sales tax production exemption definition (***see*** Tax Law § 1115[a][12]["directly and predominantly"]). Even if this term was part of the ITC statutory language, considering that the reactors are an integral part of the system of electrical production as discussed throughout this determination and that there would be no electrical production at petitioner's plants without the reactors, the reactors did play a direct role in the production of electricity. The role of the reactors amounts to "an active causal relationship in the production of the product to be sold" (***see*** 20 NYCRR 528.13[c][1][ii] [sales tax production exemption regulations]; ***see also*** 20 NYCRR 528.13[c][2][example 3]). The fact that the reactors were located in separate structures from the turbines and generators, a situation apparently necessitated by the hazards posed by nuclear materials (the buildings that house the

reactor are called "containment" buildings), is not significant, considering the close proximity and close operating relationship between the reactors and the turbines and generators.

P. In light of the forgoing conclusions of law, it is not necessary to address the question of whether the process of changing steam to water and water to steam as described herein constitutes the "manufacture" of "goods" for ITC purposes.

ITC for Industrial Waste Treatment and Air Pollution Control Facilities

Q. Petitioner also claims an investment tax credit for industrial waste treatment facilities and air pollution control facilities pursuant to Tax Law § 210(12)(b)(i)(B). Such facilities are defined in Tax Law § 210(12)(b)(ii)(C) and (D) as follows:

> (C) Industrial waste treatment facilities shall mean property constituting facilities for the treatment, neutralization or stabilization of industrial waste or other wastes (as the terms "industrial waste" and "other wastes" are defined in section 17-0105 of the environmental conservation law) from a point immediately preceding the point of such treatment, neutralization or stabilization to the point of disposal, including the necessary pumping and transmitting facilities, but excluding such facilities installed for the primary purpose of salvaging materials which are usable in the manufacturing process or are marketable.
>
> (D) Air pollution control facilities shall mean property constituting facilities which remove, reduce, or render less noxious air contaminants emitted from an air contamination source (as the terms "air contaminant" and "air contamination source" are defined in section 19-0107 of the environmental conservation law) from a point immediately preceding the point of such removal, reduction or rendering to the point of discharge of air, meeting emission standards as established by the department of environmental conservation, but excluding such facilities installed for the primary purpose of salvaging materials which are usable in the manufacturing process or are marketable and excluding those facilities which rely for their efficacy on dilution, dispersion or assimilation of air contaminants in the ambient air after emission. Such term shall further include flue gas desulfurization equipment and attendant sludge disposal facilities, fluidized bed boilers, precombustion coal cleaning facilities or other facilities that conform with this subdivision and which comply with the provisions of the state acid deposition control act set forth in title nine of article nineteen of the environmental conservation law.

Tax Law § 210(12)(b)(iii) restricts the industrial waste treatment and air pollution control facilities credit as follows:

> However, such credit shall be allowed with respect to industrial waste treatment facilities and air pollution control facilities only on condition that such facilities have been certified by the state commissioner of environmental conservation or his designated representative, pursuant to subdivision one of section 17-0707 or subdivision one of section 19-0309 of the environmental conservation law, as complying with applicable provisions of the environmental conservation law, the public health law, the state sanitary code and codes, rules, regulations, permits or orders issued pursuant thereto.

Pursuant to Tax Law § 210(12)(b)(iii), then, DEC must certify that the subject facilities are in compliance with applicable law and regulations pursuant to ECL §§ 17-0707(1) and 19-0309(1). In nearly identical language, these sections identify the specific provisions with which the facilities must be in compliance as follows:

> No such certificate shall be issued unless the facility to which it is applicable is in compliance with applicable provisions of titles 1 to 11, inclusive, and title 19 of article 17 [Water Pollution Control], article 19 [Air Pollution Control], and title 1 of article 27 [Collection, Treatment and Disposal of Refuse and Other Solid Waste] of this chapter [ECL]; of the Public Health Law; of the state sanitary code and of regulations, permits or orders issued pursuant thereto. (ECL § 17-0707[1]).

R. In the present matter, petitioner received no certifications from DEC with respect to the facilities for which it claims the credit under Tax Law § 210(12)(b)(ii)(C) and (D). Such certification is an express condition for qualification for the credit: "credit shall be allowed . . . only on condition that such facilities have been certified" (Tax Law § 210[12][b][iii]). The absence of such certification is thus dispositive and the Division properly denied these claims.

S. Petitioner contends that the assets claimed as industrial waste and air pollution control facilities meet the intent and purpose of the certification requirement because they comply with "applicable provisions of the environmental conservation law, the public health law, the state

sanitary code and codes, rules, regulations, permits or orders issued pursuant thereto" (Tax Law § 210[12][b][iii]). The statute, however, unequivocally requires certification. As noted, the credit is allowable "*only on condition* that such facilities have been certified" (Tax Law § 210[12][b][iii][emphasis added]). There is no room in such language for petitioner's proposed "intent and purpose" analysis.

T. In light of the foregoing conclusions of law, this determination does not address the question of whether the subject assets were in compliance with the relevant law and regulations pursuant to ECL §§ 17-0707(1) and 19-0309(1) as required for certification.

U. Petitioner's contention that the facilities were denied certification because they are not regulated by DEC is not established by the facts. While DEC's lack of regulatory authority over nuclear matters is expressly referenced as a basis for rejection in the letters regarding Nine Mile's air pollution control request (***see*** Finding of Fact 41) and Ginna's industrial waste treatment request (***see*** Finding of Fact 70), there is no reference to DEC's lack of regulatory authority in DEC's rejection of Ginna's air pollution control request (***see*** Finding of Fact 60) and there is no letter rejecting Nine Mile's industrial waste treatment facilities request in the record (***see*** Finding of Fact 51). Furthermore, the Ginna industrial waste treatment facilities rejection letter indicates that certification for certain facilities would be reconsidered upon reapplication. This suggests that at least some of the Ginna facilities were eligible for certification. Also, the Nine Mile air pollution control rejection letter refers to a lack of "air permits or Certificates to Operate for any air emission sources at the plant." This suggests a separate basis for the denial apart from the lack of regulatory authority. Accordingly, the record does not establish that DEC's sole basis for its rejection of the Nine Mile and Ginna applications for tax certification was their status as nuclear facilities subject to NRC regulatory authority.

V. Petitioner also contends that the certification requirement in Tax Law § 210(12)(b)(iii) discriminates against entities outside the DEC's regulatory authority and thereby creates an unconstitutional classification on its face. As the Division of Tax Appeals is not authorized to determine the facial constitutionality of statutes (***see Matter of Eisenstein***, Tax Appeals Tribunal, March 27, 2003), this contention may not be addressed herein.

Employment Incentive Credit

W. Tax Law § 210(12-D) allows for an employment incentive credit where a taxpayer is allowed an ITC credit under Tax Law § 210(12) and where certain requirements not at issue, including employment requirements (***see*** Finding of Fact 100), are met. Accordingly, petitioner's entitlement to the subject employment incentive credits turns on its entitlement to the ITC credits at issue. As petitioner has not established entitlement to such ITC credits, its claim for employment incentive credits must also fail.

Industrial or Manufacturing Business Credit

X. During the years at issue, Tax Law § 210(26-a)(a) allowed a credit for energy taxes for taxpayers that were industrial or manufacturing businesses to be computed as provided in Tax Law § 14-a. That section defined an IMB as "a business which during the taxable year is principally engaged in activities described in [Tax Law § 210(12)(b)(i)(A), (B) or (C)]" (Tax Law § 14-a[b]). The definition in Tax Law § 14-a(b) thus takes the ITC production credit for property and applies it to the business as a whole.

Petitioner contends that it was an IMB pursuant to Tax Law § 210(12)(b)(i)(A) because it was principally engaged in the production of goods by manufacturing, that is, steam from water and water from steam. There is little room for doubt, however, that petitioner's business was principally engaged in the production of electricity. As discussed, all of the assets that are the

subject of the ITC production claims were principally engaged in electricity production, the turbines and generators were concededly engaged in electricity production, and the only output of the system and the only product sold was electricity. As electricity is a statutorily defined "non-good" (***see*** Tax Law § 210[12][b][i]; Conclusion of Law C), petitioner was not principally engaged in the production of goods and was not, therefore, an IMB. Accordingly, this claim, too, must fail.

Y. The petition of Constellation Nuclear Power Plants LLC is denied and the Division of Taxation's denial of petitioner's refund claims, dated March 8, 2007, is sustained.

DATED: Albany, New York
April 11, 2013

/s/ Timothy Alston
ADMINISTRATIVE LAW JUDGE