STATE OF SOUTH CAROLINA
ADMINISTRATIVE LAW COURT

Duke Energy Corporation, Petitioner, v. South Carolina Department of Revenue, Respondent.	Docket No. 12-ALJ-17-0031-CC **ORDER GRANTING PETITIONER'S MOTION FOR SUMMARY JUDGMENT**

STATEMENT OF THE CASE

This matter is before the Administrative Law Court (ALC or court) pursuant to a Request for Contested Case filed by Duke Energy Corporation (Petitioner). The Petitioner contests the determination of the South Carolina Department of Revenue regarding the tax-exempt status of canister systems purchased by the Petitioner to contain spent nuclear fuel.

The Petitioner filed South Carolina sales and use tax returns for the taxable periods April 1, 2002 through December 31, 2004. During that time, the Petitioner purchased $19,764,879.66 of out-of-state canister systems. Except for $167,398.11, which it claims was paid in error, the Petitioner did not pay South Carolina use tax on the canister systems. The Petitioner has requested a refund for the $167,398.11 with interest, while the Department maintains that this is only a portion of the use tax the Petitioner owes, totaling $1,018,436.60 plus interest and penalties.

The parties filed cross motions for summary judgment and a hearing was held for the parties to present their arguments. After review of the filings and arguments of the parties, the court grants the Petitioner's motion for summary judgment and denies the Respondent's.

ISSUES PRESENTED

Whether the canister systems utilized by the Petitioner to contain spent nuclear fuel rods following the manufacture of electricity are exempt under S.C. Code Ann. § 12-36-2120(17) as pollution control machines.

LEGAL STANDARD

The court has jurisdiction over this matter pursuant to S.C. Code Ann. § 12-60-460 (2014). Under this statute, the court hears this matter as a contested case. *See* S.C. Code Ann. § 12-60-460 (2014); *see also* S.C. Code Ann. § 1-23-600(A) (Supp. 2016). In a contested case, the court's

review is *de novo*. *Engaging & Guarding Laurens Cty.'s Env't (EAGLE) v. S.C. Dep't of Health & Envtl. Control*, 407 S.C. 334, 344, 755 S.E.2d 444, 449 (2014).

In this matter, both parties have filed for summary judgment. The ALC hears motions for summary judgment under Rule 68, SCALC, which grants discretion to apply the South Carolina Rules of Civil Procedure in a contested case. Rule 56(c), SCRCP, states that summary judgment shall be granted if "there is no genuine issue as to any material fact" and "the moving party is entitled to a judgment as a matter of law." "Summary judgment is appropriate if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." *Singleton v. Sherer*, 377 S.C. 185, 197, 659 S.E.2d 196, 202 (Ct. App. 2008) (citations omitted). Summary judgment should be granted "when plain, palpable, and indisputable facts exist on which reasonable minds cannot differ." *Hedgepath v. Am. Tel. & Tel. Co.*, 348 S.C. 340, 355, 559 S.E.2d 327, 336 (Ct. App. 2001) (citation omitted). "In determining whether any triable issue of fact exists, the evidence and all inferences which can reasonably be drawn therefrom must be viewed in the light most favorable to the nonmoving party." *Pye v. Estate of Fox*, 369 S.C. 555, 563, 633 S.E.2d 505, 509 (2006) (citations omitted).

FINDINGS OF FACT

The court finds that the following material facts are undisputed in this matter.

The Petitioner is engaged in the generation, transmission, distribution, and sale of electricity in South Carolina. The Petitioner operates two nuclear power plants in South Carolina: Catawba Nuclear Station in York County, which began producing power in 1985, and Oconee Nuclear Station in Oconee County, which began producing power in 1973. The nuclear fuel used by the Petitioner in its plants consists of ceramic pellets containing uranium enriched in the uranium-235 isotope that are stacked in rods. These rods are arranged in nuclear fuel assemblies, which are loaded into the nuclear reactors.

When rods in the reactor have fissioned to the extent that the fuel can no longer sustain the chain reactions necessary to support normal operating levels of a nuclear reactor, the nuclear fuel is said to be "spent" (*i.e.*, reached the end of its useful life). Spent nuclear fuel assemblies must be unloaded from the reactor core, at which point the spent nuclear fuel is extremely hot and highly radioactive. The radiation from the rods can pollute the environment and pose significant health hazards to humans, especially if ingested or inhaled. To protect against these dangers, spent

nuclear fuel assemblies are removed from the reactors and transferred to "spent fuel pools." The spent fuel pools contain borated water and are designed to cool the spent nuclear fuel and shield operators and the public from radiation emitted by the spent nuclear fuel and other hazards.

Because of its inherent dangers, spent nuclear fuel is strictly regulated and licensed by the United States Nuclear Regulatory Commission (NRC) to prevent or mitigate pollution. When the Petitioner's spent fuel pool systems reach maximum capacity, the Petitioner has three (3) options available to it for storage that comply with NRC regulations. First, the Petitioner could expand its existing spent fuel pools or build new spent fuel pools, the costs of which can run into the hundreds of millions. Second, the Petitioner could build an independent spent fuel storage installation (ISFSI) at the reactor site and move the spent nuclear fuel to dry spent nuclear fuel storage systems. Third, the Petitioner could shut down the nuclear power plant and cease the production of electricity.[1]

Because the first option is unavailable and the third option is, for obvious reasons, not a viable one for the Petitioner, the Petitioner considers the ISFSI dry storage option to be the only option.[2] The ISFSI consists of canister systems that holds the spent fuel rods. The canister systems are mechanical devices that act to transmit forces, motion, and energy among their constituent components in a predetermined and acceptable manner. The canisters serve the same function as the spent fuel pools: confinement of radiation, shielding of radiation, and criticality control. The canister systems are designed to accommodate a tremendous range of external forces ranging from excessive and minimal solar heat input, heavy wind, snow and ice loadings, flooding, seismic excitation, to impact loads imposed by tornado missiles. Specifically, the Petitioner's expert witness, Charles Pennington, identified the following functions related to pollution control that the Canister Systems serve: (1) confinement of the radiation emitted by the spent nuclear fuel to protect the public and to assure environmental protection; (2) prevent criticality within the spent nuclear fuel by maintaining the spent nuclear fuel in an appropriate geometry; (3) cool the spent nuclear fuel; (4) assure appropriately non-reactive environments surrounding the spent nuclear fuel to avoid corrosion and preserve the integrity of the spent nuclear fuel; (5) protect important

[1] The Petitioner cannot move spent nuclear fuel off-site because the NRC has not licensed any facilities to accept spent nuclear fuel in significant quantities, and because the federal government has no immediate plans to open the Yucca Mountain Nuclear Waste Repository in Nevada, the only facility that could possibly accommodate the spent nuclear fuel.

[2] The Department determination states that the Petitioner spent a total of $19,764,879.66 on out-of-state ISFSI canister systems during the period at issue in this case (April 2002 to December 2004).

structures, systems, and components. All of these functions are related to NRC requirements.[3] Based on this undisputed evidence, the court finds that the canister systems are used to control or abate pollution caused by the spent nuclear fuel and avert significant harms to the Petitioner's employees and the public and are so used to comply with the requirements of the Petitioner's licensor and regulator, the NRC, a United States agency.

CONCLUSIONS OF LAW

Based upon the above Findings of Fact, the court makes the following conclusions as a matter of law:

Statutory Authority

In South Carolina, a sales tax is imposed "upon every person engaged or continuing within this State in the business of selling tangible personal property at retail." S.C. Code Ann. § 12-36-910(A) (2014). A use tax is "imposed on the storage, use, or other consumption in this State of tangible personal property purchased at retail for storage, use, or other consumption in this State . . . ." S.C. Code Ann. § 12-36-1310 (2014). Both of these taxes apply to the "gross proceeds accruing or proceeding from the sale of electricity[.]" S.C. Code Ann. §§ 12-36-910(B)(2) & 12-36-1310(B)(2) (2014). Exempted from these taxes are the "gross proceeds of sale,[4] or sales price[5] of:"

> ***
>
> (17) machines used in manufacturing, processing, agricultural packaging, recycling, compounding, mining, or quarrying tangible personal property for sale. "Machines" include the parts of machines, attachments, and replacements used, or manufactured for use, on or in the operation of the machines and which (a) are necessary to the operation of the machines and are customarily so used, or (b) are necessary to comply with the order of an agency of the United States or of this State for the prevention or abatement of pollution of air, water, or noise that is caused or threatened by any machine used as provided in this section. . . .

---

[3] The way the Petitioner maintains, handles, and stores spent nuclear is dictated by standards and limitations established by the NRC in the Code of Federal Regulations. *See, e.g.*, 10 C.F.R. § 20.1001; 42 U.S.C. § 2011 *et seq.* The Petitioner is required to use "procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA)." 10 C.F.R. § 20.1101(b). The Petitioner must ensure that the annual, occupational dose limits for adults and minors, as well as dose limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities does not exceed certain limits. 10 C.F.R. §§ 20.1201(a), 20.1207, 20.1301. The Petitioner must ensure that direct radiation from the ISFSIs do not exceed annual dose limits for real individuals set forth in 10 C.F.R. § 72.104. *See* 10 C.F.R. § 72.106. The canister systems at issue in this case are listed by model name and number as having been approved by the NRC for use in the on-site management of spent nuclear fuel and the prevention or abatement of harmful radiation from the spent nuclear fuel. 10 C.F.R. § 72.214.

[4] Defined in S.C. Code Ann. § 12-36-90 (2014 & Supp. 2016).

[5] Defined in S.C. Code Ann. § 12-36-130 (2014).

S.C. Code Ann. § 12-36-2120(17) [6] (2014); *see also* S.C. Code Ann. Reg. 117-302.6 (2012) (further expounding upon "Pollution Control Machines"). Thus, the Petitioner, a manufacturer of electricity, is exempt from taxes on machines which are necessary to comply with the order of a United States agency to prevent or abate pollution that is precipitated by other manufacturing machines used in the process of generating electricity. From this, the court derives three elements that must be met: (1) a machine that (2) prevents or abates pollution caused by machines used in the manufacturing process and is (3) necessary to comply with the order of an agency.

"As a general rule, tax exemption statutes are strictly construed against the taxpayer." *Se.-Kusan, Inc. v. S.C. Tax Comm'n*, 276 S.C. 487, 489, 280 S.E.2d 57, 58 (1981) (citation omitted). This means that "constitutional and statutory language will not be strained or liberally construed in the taxpayer's favor," but neither will the court "search for an interpretation in the [Department's] favor where the plain and unambiguous language leaves no room for construction." *Id.* (citation omitted). In this case, the court finds the language of the statute to be plain and unambiguous. The machines which the Petitioner assert are tax exempt fall squarely within the plain meaning of the exemption statute. Conversely, the Department's interpretation strains the language and produces an absurd result.[7]

Machine

"The term 'machine' includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." *Hercules Contractors & Engineers, Inc. v. S.C. Tax Comm'n*, 280 S.C. 426, 431, 313 S.E.2d 300, 303 (Ct. App. 1984); *see also* S.C. Code Ann. Reg. 117-302.5(B)(1) (2012) (construing "machine" in the

[6] Subsection (b) was added by the General Assembly in 2000 by Act 399. This portion is referred to throughout this order as "Clause B." It is worth noting that the relatively recent advent of this addition means that prior case law and Department policy typically interpret only the prefatory language and Clause A of the statute.

[7] The Department argues that it is a fundamental misapprehension to separate the two clauses, (a) and (b), in the statute and that all machines exempted under this subsection must be integral and necessary to the manufacturing process. The court finds this contrary to the language of the statute on its face. Quite simply, the statute says "or." The statute exempts machines integral and necessary to the manufacturing process *or* machines that prevent or abate pollution from those integral and necessary machines. Although the pollution must originate from a manufacturing machine, the pollution control machine need not be integral to manufacturing itself. To read the statute otherwise would result in redundancy because the pollution control machine would already be exempt under Clause A and there would be no need for Clause B.

context of Clause A of the above subsection). A machine does not need moving parts to qualify for the exemption. *Id.* (citation omitted).

The uncontroverted evidence in this matter demonstrates that the canister systems are mechanical devices that act to transmit forces, motion, and energy among their constituent components to prevent or mitigate radiation exposure. The radiation exposure risk comes from the machines essential to the production of the electricity, namely the fuel rods and nuclear reactors. Therefore, the court concludes that the canister systems are machines for purposes of the statute. Furthermore, the court concludes that the canister systems are used because of pollution produced or potentially caused by machines necessary and integral to the Petitioner's manufacturing process.

Prevention or Abatement of Pollution

To be exempt under Clause B, a machine must be for the prevention or abatement of pollution of air, water, or noise. S.C. Code Ann. § 12-36-2120(17) (2014). It is undisputed that the canister systems used by the Petitioner control pollution in the form of radiation that would be extremely harmful to its employees, the public at large, and the environment. The canister systems prevent radiation exposure and prevent the fuel rods from going critical, even in catastrophic circumstances. For these reasons, the court concludes that the canister systems are for the prevention or abatement of pollution.

Necessary

Subsection (17) requires that the pollution control machines be necessary to comply with an agency order. The Department argues that the Petitioner's canister systems are not necessary under the terms of the statute. As explained in the facts, the Petitioner essentially has two choices for storing its spent fuel rods, assuming continued operation and absent a permanent storage solution from the federal government. The Petitioner chose the canister systems because they are more cost effective than expanding their spent fuel pool systems. Although, the Department conceded at the hearing that the spent fuel must be stored, it argues that because there is a choice in method of storage, the canister systems are not "necessary." The court finds this to result in absurdity. Where a necessary result must be achieved, one of the available routes to achieve that result must be utilized (*i.e.*, dry storage or wet storage). It defeats the purpose of the statute to conclude that a machine is unnecessary because there is more than one type of machine that can accomplish the same necessary pollution prevention task. The Petitioner must store the spent fuel

rods to prevent pollution and comply with the order of a federal agency. Thus, the machines in question are necessary.

Order of an Agency

Subsection (17) requires that the pollution control machine be "necessary to comply with the order of an agency of the United States or of this State." S.C. Code Ann. § 12-36-2120(17) (2014). The dictionary defines order as "a rule or regulation made by a competent authority." *Webster's Third New International Dictionary* 1588 (1993). In legal use, an order is a "command, direction, or instruction." *Black's Law Dictionary* (ORDER) (10th ed. 2014). A subtype of order is an "administrative order" which includes "[a]n agency regulation that interprets or applies a statutory provision." *Id.* Per regulation, the order "must be issued by the agency of the United States or of this state that is primarily charged with the duty of preventing or abating the pollution." S.C. Code Ann. Regs. 117-302.6 (2012).

Based upon the plain language meaning of the statute, the court concludes that agency regulations satisfy the statute. As discussed above, the canister systems are utilized by the Petitioner to comply with regulations of the NRC regarding hazardous nuclear material.[8] The NRC is an independent United States agency created specifically to help control the type of pollution at issue in this case. *See* 42 U.S.C. § 2201(b) ("In the performance of its functions the Commission[9] is authorized to . . . (b) establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable . . . to protect health or to minimize danger to life or property . . . ."). Because the Petitioner is using the canister systems to comply with regulations of a United States agency created for the purpose of controlling nuclear fuel and its pollution, the court concludes that the requirement for compliance with an agency order is met.

However, Regulation 117-302.6 also requires that the taxpayer "furnish the department a certified statement from the ordering agency that any machine for which the exemption is claimed is necessary to prevent or abate pollution caused or threatened by the operation of other

[8] See, *supra*, note 3. Specifically, the Petitioner points to a comprehensive set of NRC regulations in 10 C.F.R. Part 20 and 10 C.F.R. Part 72, relating to spent nuclear fuel, radiation, and dry spent-fuel storage systems. Violations of these regulations can result in significant civil and criminal penalties. 10 C.F.R. § 72.86; *see* 42 U.S.C. § 2273.

[9] Under the cited statute the term "Commission" meant "the Atomic Energy Commission." 42 U.S.C. § 2014(f). After reorganization of the national nuclear regulatory scheme, the function of the Atomic Energy Commission devolved upon the NRC. 42 U.S.C. § 5841(f) ("There are hereby transferred to the Commission all the licensing and related regulatory functions of the Atomic Energy Commission . . . .").

machines . . . ." There is no evidence that the Petitioner has, as of this date, provided such a statement to the Department. The Department asserts that this provision is a record-keeping requirement that aids the Department in making a determination about a tax exemption. *See generally* S.C. Code Ann. § 12-36-2540 (2014). The court agrees. However, it is apparent, based on the deposition of the Department's policy expert, John McCormack, that the Department has not enunciated any policy defining what constitutes a certified statement. Because this is a record-keeping requirement which does not go directly to the merits of the exemption itself under the law, this court finds the Petitioner's failure to provide such a statement does not require a denial of the Petitioner's motion. Rather, the court conditions any refund the Petitioner may receive for the exemption of the pollution control machines upon provision of such a statement upon the Department providing the Petitioner with guidance on what it would accept as a certified statement for record-keeping purposes.

Department's Motion

In its motion for summary judgement the Department argues, based on the idea that the canister systems are not part of the manufacturing process, that they are not eligible for exemption under Subsection (17). As noted, *supra*, in note 7, the court rejects this argument. The Department's position is flawed for the following reasons: it is based on the improper assumption that the pollution control machines must be part of the manufacturing process, it ignores the addition of Clause B to the statute, it defeats the plain language purpose of Clause B, and it renders Clause B meaningless.

The Department interprets Subsection (17) to require that a machine that prevents or abates pollution also be a machine integral to manufacturing process.[10] This interpretation ignores the plain language of the statute ("or), and makes Clause B superfluous. The court "must read the statute so that no word, clause, sentence, provision or part shall be rendered surplusage, or superfluous, for the General Assembly obviously intended the statute to have some efficacy, or the legislature would not have enacted it into law." *CFRE, LLC v. Greenville Cty. Assessor*, 395 S.C. 67, 74, 716 S.E.2d 877, 881 (2011) (internal punctuation and citations omitted). A machine

[10] Because the court finds this contrary to the plain language of the statute, it does not address the Department's argument that the definition of a manufacturing machine from Regulation 302.5 directly applies in this case. As noted, the court agrees that the machine causing the pollution must be a manufacturing machine. However, there is a separate section of the same regulation for pollution control machines. Notably, that regulation specifically refers to "other machines" when discussing the cause of the pollution which must be control be machines exempt under Clause B. *See* S.C. Code Ann. Reg. 117-302.6 (2012).

integral to the manufacturing process was already exempted prior to the enactment of Clause B. There would be no reason to add Clause B to the statute if it did not accomplish an additional purpose.

The Department argues that the facts in this case are analogous to two prior ALC cases regarding storage. *See Anonymous Corporation v. S.C. Dep't of Revenue*, 02-ALJ-17-0350-CC (S.C. Admin. L. Judge Div. July 8, 2003); *Anonymous Corporation v. S.C. Dep't of Revenue*, 99-ALJ-17-0153-CC (S.C. Admin. L. Judge Div. Nov., 9, 1999) (*aff'd, S.C. Dep't of Revenue v. Springs Industries, Inc.*, Unpublished Opinion No. 2003-UP-029 (S.C. Ct. App. Feb. 28, 2003)). These cases dealt with racks used for storage of yarn or fiber and whether they were integral to the manufacturing process. The Department's analysis ignores the fact that unlike those cases where the manufacturers were storing yarn and fiber, the Petitioner is not storing its product, electricity. Rather, the Petitioner is storing a part or component of its manufacturing machines in order to prevent the active and ongoing disbursement of pollution. This is the purpose enunciated by the plain language of the statute. Moreover, the issue is not whether the canister systems produce a saleable good from a byproduct, eligible for a manufacturing machine exemption like in *U.S. Steel*,[11] but whether the canister systems prevent pollution in the manner required by the current version of the machine exemption subsection. For the foregoing reasons, the court concludes that the Department is not entitled to summary judgment as a matter of law and denies its motion.

Summary

The three elements that must be met for exemption under Subsection (17), Clause B are: (1) a machine that (2) prevents or abates pollution caused by machines used in the manufacturing process and is (3) necessary to comply with the order of an agency. In this case, there is no genuine issue of material fact that the canister systems are (1) machines that (2) prevent or abate nuclear radiation originating from machines used to manufacture electricity (3) necessary to comply with the regulations of a federal agency that has the responsibility to oversee control of this type of pollution. Therefore, the court concludes that the canister systems are exempt from tax under S.C. Code Ann. § 12-36-2120(17) as pollution control machines.

[11] *U. S. Steel Corp. v. Bd. of Assessment & Revision of Taxes of Bucks Cty.*, 422 Pa. 463, 223 A.2d 92 (1966) (later superseded by legislative action as noted in *Reichard-Coulston, Inc. v. Revenue Appeals Bd. Northampton Cty.*, 102 Pa. Cmwlth. 227, 231–32, 517 A.2d 1372, 1374–75 (1986)) (discussing steel slag pits).

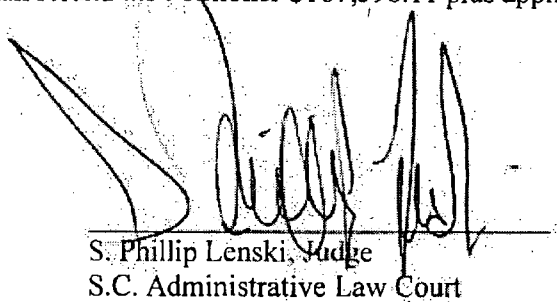
ORDER

THEREFORE, IT IS HEREBY ORDERED that the Petitioner's Motion for Summary Judgment is **GRANTED.**

IT IS FURTHER ORDERED that the Respondent's Motion for Summary Judgment is **DENIED.**

IT IS ALSO ORDERED that the Department shall provide guidance to the Petitioner on obtaining a certified statement within thirty (30) days. Within sixty (60) days of the provision of such a certified statement, the Department shall refund the Petitioner $167,398.11 plus applicable interest.

AND IT IS SO ORDERED.



S. Phillip Lenski, Judge
S.C. Administrative Law Court

April 28, 2017
Columbia, South Carolina

CERTIFICATE OF SERVICE

I, Edye U. Moran, hereby certify that I have this date served this Order upon all parties to this cause by depositing a copy hereof, in the United States mail, postage paid, in the Interagency Mail Service, or by electronic mail to the address provided by the party(ies) and/or their attorney(s).

Edye U. Moran
Judicial Law Clerk to S. Phillip Lenski

April 28th, 2017
Columbia, South Carolina