UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TENNESSEE
AT KNOXVILLE

NATIONAL PARKS CONSERVATION ASSOCIATION, INC., SIERRA CLUB, INC., and OUR CHILDREN'S EARTH FOUNDATION, Plaintiffs, v. TENNESSEE VALLEY AUTHORITY, Defendant.	)	No.: 3:01-CV-71 (VARLAN/GUYTON)

MEMORANDUM AND ORDER

This civil action is before the Court on plaintiffs National Parks Conservation Association, Inc., Sierra Club, Inc., and Our Children's Earth Foundation's (hereinafter collectively referred to as "Plaintiffs") Motion for Summary Judgment [Doc. 135] and defendant Tennessee Valley Authority's ("Defendant TVA") First Motion for Summary Judgment. [Doc. 129.] Each of the parties has responded in opposition to the respective motions [Docs. 141, 144], and filed reply briefs in support of their motions. [Docs. 146, 149.] Additionally, the Court heard argument on the motions on September 2, 2008. [Docs. 166, 167.] At the close of the hearing, the Court took the matter under advisement. After carefully considering the pending motions, related pleadings, the record, and the arguments offered during the hearing, the Court rules on the motions as set forth herein.[1] [*See* Docs.

[1]All ECF filing citations are cited as they are currently assigned on ECF. The ECF upgrade on March 2, 2009, has resulted in the current attachment numbers in CM/ECF being one number

129, 134, 135, 136, 138, 141, 142, 144, 146, 149, 159, 161, 166, 167, 168, 169.] For the reasons set forth herein, the parties' respective motions for summary judgment will be denied.

I. RELEVANT FACTS

On February 13, 2001, Plaintiffs filed the original complaint in this action, which has been subsequently amended. [*See* Docs. 1, 80.] In this citizen suit, Plaintiffs allege that Defendant TVA violated the Clean Air Act, 42 U.S.C. §§ 7401-7671q, the Tennessee State Implementation Plan, and relevant regulations. [*See* Doc. 80.] Defendant TVA is a corporate agency and instrumentality of the United States that maintains and operates one of the nation's largest electric power systems. The integrated system of electricity generating facilities includes eleven coal-fired electricity generating plants comprised of fifty-nine units located in Kentucky, Tennessee, Alabama. 16 U.S.C. §§ 831-831ee; *4-County Elec. Power Ass'n v. Tenn. Valley Auth.*, 930 F. Supp. 1132, 1135 (S.D. Miss. 1996). One of Defendant TVA's coal-fired plants is the Bull Run Power Plant ("Bull Run") located in Clinton, Tennessee, that began operation in 1967.

Bull Run and similar coal-fired plants generate electricity by burning coal to create steam in a boiler and then passing the steam through a turbine to drive a generator that ultimately produces electricity. [Doc. 80 at 5-6.] Carbon dioxide (CO_2), oxides of nitrogen (NO_x), sulfur dioxide (SO_2), and other gases, referred to as flue gases, are produced as by-

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lower than the original attachment numbers assigned at the time of filing, e.g., originally assigned Doc. 136-7 is currently numbered 136-6 in the ECF document numbering system.

products of burning the coal in the boiler in a process known as "coal combustion." [Doc. 129-51 at 12.] Boilers have two major sections - the radiant section and the convection section. The radiant section includes the furnace. [Doc. 129-51 at 12-13.] Bull Run has twin, divided furnaces, each with separate but identical convection sections. The convection sections include a vertical finishing superheater, vertical reheater, low-temperature vertical superheater, horizontal superheater, horizontal reheater, and economizer. [Doc. 129-33 at 5.] Bull Run has approximately 300 miles of tubing in the furnace, economizer, superheater, and reheater. [Doc. 129-39 at 9.]

"Outages" occur when a generating unit is shut down. "Planned" outages occur periodically and involve advanced planning and scheduling for work to be done during the outage. [Docs. 129-40 at 7-8; 129-42 at 17-18.] A "forced" outage is unplanned and results from the failure of individual components. During an unplanned outage, repair efforts are focused on the problem that caused the outage, such as a boiler tube leak. [Doc. 129-42 at 18.] Beginning on March 11, 1988, there was a planned outage at Bull Run that lasted until June 26, 1988, though the planned outage work was completed by June 1, 1988. [Doc. 129-42 at 44.] During this planned outage, work was performed on certain components at Bull Run. Defendant TVA replaced an amount of waterwall tubing and applied a metal coating to some waterwall tubing. Portions of high-pressure and low-pressure turbine blades were also replaced. [Doc. 129-42 at 35, 37.] Additionally, there was work involving Bull Run's economizer and finishing superheater.

Bull Run's economizer is the last component that receives heat energy from the combustion gas and is located in the lowest portion of the convection section of the boiler. [Doc. 129-33 at 5.] The purpose of the economizer is to absorb as much of the heat remaining in the flue gases as possible before the gases exit the boiler. [Doc. 129-51 at 14.] Economizers are comprised of an inlet header, heat exchange tubes or elements, and the outlet header. [Docs. 129-33 at 5; 129-51 at 14.] Bull Run has two completely separate but identical economizers because it is a twin furnace type plant, one in the "A" furnace and one in the "B" furnace. [Doc. 129-39 at 11.] As early as 1975, inspection of the economizer elements at Bull Run indicated tube damage due to external erosion caused by fly ash. [Doc. 129-33 at 5.] On June 10, 1987, Defendant TVA's Board of Directors approved the economizer project at issue in this case. [Doc. 129-61 at 2.] For the economizer project, which occurred during the planned outage in the spring of 1988, all of the economizer tube elements in both the A and B furnaces at Bull Run were replaced. Each of the identical twin furnaces contains 232 elements of straight-finned tubing. [Doc. 129-33 at 5.] For the 1988 economizer replacement, the design of the replacement was the same as the design of the original economizer, also known as an "in-kind" replacement. [Doc. 129-40 at 3.] The cost of the 1988 economizer replacement was $6,456,599.14 in 1988 dollars. [Doc. 129-33 at 6.] In April of 2006, the Bull Run economizer was again replaced. [Doc. 129-33 at 5.]

During the planned outage in spring of 1988, Defendant TVA also performed a partial replacement of Bull Run's finishing superheater. Bull Run's superheater is comprised of a horizontal, convective type primary section, division panels and the furnace arch nose, a

finishing pendant section located above the furnace arch, and interconnecting tubing and headers. [Doc. 129-33 at 7.] The superheater, as suggested by its name, "super heats the steam" coming from other sections of the boiler to more than 1000 degrees Fahrenheit. [Docs. 129-40 at 4; 129-42 at 13.] The portion of the superheater at issue in the present case is the "secondary," "pendant," or "finishing" superheater (hereinafter referred to as "finishing superheater"). [Doc. 129-40 at 4.] The finishing superheater is the last section of tubes that the steam passes through before leaving the boiler and going to the main turbine. It is comprised of groups of tubes that hang down from the top of the boiler. [Doc. 129-42 at 45.] Initially, the elements of the finishing superheater at Bull Run were made of two dissimilar metals welded together, a lower grade T-22 metal and a TP-347 material. The T-22 metal was exposed to temperatures beyond its design limit for extended periods, which resulted in swelling of tubes and the occurrence of failures. Tube-by-tube repairs were made on the superheater until the economic rate of return for the project increased and the superheater partial replacement was approved in the summer of 1987. [Doc. 129-33 at 7.] The superheater project involved replacement of about three-quarters of each tubing element in the finishing superheater. [Docs. 129-33 at 7; 129-40 at 4, 6.] As part of the superheater project, tubes made of other materials were replaced with those made of a TP-347H material. [Doc. 129-40 at 6.] The cost of the partial superheater replacement project was $1,846,680.59 in 1988 dollars. [Doc. 129-33 at 8.]

In 2001, Plaintiffs filed this citizen suit alleging that Defendant TVA violated the Clean Air Act, 42 U.S.C. §§ 7401-7671q, the Tennessee State Implementation Plan, and

certain federal regulations due to the economizer and superheater projects at Bull Run in 1988.

II. ANALYSIS

A. Standard of Review

Under Federal Rule of Civil Procedure 56(c), summary judgment is proper "if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). The moving party bears the burden of establishing that there is no genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 330 n.2 (1986). The court must view the facts and all inferences to be drawn therefrom in the light most favorable to the non-moving party. *Matsushita Elec. Indus. Co., Ltd., v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *Burchett v. Kiefer*, 310 F.3d 937, 942 (6th Cir. 2002). To establish a genuine issue as to the existence of a particular element, the non-moving party must point to evidence in the record upon which a reasonable finder of fact could find in its favor. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The genuine issue must also be material; that is, it must involve facts that might affect the outcome of the suit under the governing law. *Id.*

The judge's function at the point of summary judgment is limited to determining whether sufficient evidence has been presented to make the issue of fact a proper question for the fact finder. *Id.* at 249. The judge does not weigh the evidence, judge the credibility of witnesses, nor determine the truth of the matter. *Id.* Thus, "[t]he inquiry performed is the

threshold inquiry of determining whether there is the need for trial - whether, in other words, there are any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." *Id.* at 250.

B. Objections to Exhibits

In its response to Plaintiffs' motion for summary judgment, Defendant TVA raises objections related to the following exhibits: (1) Defendant TVA's Objections and Response to Plaintiffs' First and Second Set of Interrogatories [Doc. 136-4]; (2) Objections made at the deposition of Donald P. Houston ("Mr. Houston") [Doc. 136-5]; (3) Plaintiffs' Proffered Tennessee Regulations [Doc. 136-6]; (4) Decision of the Environmental Appeals Board ("EAB") [Doc. 136-9]; (5) Objections set forth in Defendant TVA's Responses to Plaintiffs' First Request for Admissions [Doc. 136-10]; (6) Declaration and Report of Robert H. Koppe ("Mr. Koppe") [Doc. 136-19]; and (7) Objections made at deposition of Jerry L. Golden ("Mr. Golden") [Doc. 136-21].

Defendant TVA does not object to the exhibit entitled "Tennessee Valley Authority's Objections and Response to Plaintiffs' First and Second Set of Interrogatories." [Doc. 136-4.] Rather, it incorporates objections raised in that document into its response to Plaintiffs' motion for summary judgment. The Court notes that many of these objections are discovery-related and are not about the admissibility of certain exhibits for purposes of the present motions. Thus, the Court will overrule those objections to the extent they are discovery matters unrelated to the present motions for summary judgment. To the extent Defendant incorporates objections about "significant air emissions," these objections are closely related

to Defendant TVA's substantive arguments for the pending summary judgment motions. Therefore, the Court will address these objections as part of the substantive analysis of the issues in this case.

To the extent Defendant TVA makes objections to portions of the depositions of Mr. Houston, Mr. Koppe, and Mr. Golden, the Court overrules the objections for purposes of the pending motions for summary judgment. Defendant TVA has generally incorporated objections made at the depositions of Mr. Houston, Mr. Koppe, and Mr. Golden [Docs. 136-5, 136-19, 136-21] and has not provided any specific arguments regarding these previous objections in its responsive brief. Additionally, Defendant TVA has not provided the Court with specific page numbers for these incorporated objections nor any other means of identifying the objections contained in depositions totaling over 750 pages in length. The Court "will not scour the record to construct or reconstruct" these objections. *United States v. Cinergy Corp.*, 495 F. Supp. 2d 909, 914 (S.D. Ind. 2007). Thus, the Court overrules these general and incorporated objections for the purposes of the pending motion for summary judgment.

Defendant TVA also objects to Plaintiffs' proffered Tennessee Regulations [Doc. 136-6] to the extent there is any question about the text of the regulations. At this time, it does not appear that the parties have identified any specific disputes between the text of the regulations provided by Plaintiffs and Defendant TVA. [Docs. 129-4; 136-6] Accordingly, the Court overrules this objection but will allow Defendant TVA to raise this objection again should a dispute regarding the text of the regulations arise.

Defendant TVA objects to the EAB decision to the extent that it is given any force or effect in the present proceedings. [Doc. 136-9.] Defendant TVA notes that the Eleventh Circuit invalidated the EAB's decision and stated that it was "legally inconsequential" in *Tenn. Valley Auth. v. Whitman*, 336 F.3d 1236 (11th Cir. 2003). Plaintiffs contend that the decision is probative of the issues in this case even though it is not dispositive. Thus, the parties agree that the EAB decision has no binding effect on the Court in this case. Accordingly, the Court will sustain Defendant TVA's objection to the extent that the EAB decision will not be given any binding force or effect in the present case. However, the Court will consider the EAB decision to the extent it may have probative value, if any, in this matter.

As with its "objections" relating to the exhibit entitled "Tennessee Valley Authority's Objections and Response to Plaintiffs' First and Second Set of Interrogatories" [Doc. 136-4], Defendant incorporates objections raised in its "Responses to Plaintiffs' First Request for Admissions." [Doc. 136-10.] After reviewing the objections, the Court notes that they are essentially arguments already raised in the parties' motions for summary judgment, response, and reply briefs. Therefore, the Court will address these objections as part of the substantive analysis of the issues in this case.

To the extent Defendant TVA objects to the declaration and report of Mr. Koppe [Doc. 136-19], the Court notes that the Motion in Limine to Exclude the Opinion Testimony of Robert H. Koppe [Doc. 132] has been denied to the extent that Mr. Koppe's opinions satisfy the requirements of *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1998). [*See*

Doc. 165.] Thus, Defendant TVA's objections to the exhibits relating to Mr. Koppe are overruled to the extent they are based on *Daubert*. The remaining argument focusing on the relevance of this evidence is intertwined with the Court's discussion of "significant air emissions" below. Therefore, the Court will address this objection as part of the substantive analysis of the issues in this case.

C. Statutory and Regulatory Background

During the 1970s, amendments to the Clean Air Act ("CAA") were enacted to further address the problem of air pollution. *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 845-47 (1984). The Clean Air Amendments of 1970 directed the United States Environmental Protection Agency ("EPA") to devise National Ambient Air Quality Standards ("NAAQS") limiting various pollutants. 42 U.S.C. § 7409. The States were then to develop plans to implement and enforce the NAAQS, known as State Implementation Plans ("SIPs"). 42 U.S.C. § 7410; *see also Envtl. Def. v. Duke Energy Corp.*, 549 U.S. 561, 566 (2007). Thus, the CAA established a joint state and federal program to control air pollution. *County of Delaware, Pa. v. Dep't of Transp.*, 554 F.3d 143, 145 (D.C. Cir. 2009). The 1970 Amendments also provided that major new sources of pollution were required to conform to technology-based performance standards and that the EPA was to establish New Source Performance Standards ("NSPS") for new and modified stationary sources of air pollution. 42 U.S.C. § 7411; *Duke Energy Corp.*, 549 U.S. at 566; *Chevron U.S.A.*, 467 U.S. at 846. The EPA's subsequent regulations implementing the NSPS control scheme provide:

> [A]ny physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

40 C.F.R. § 60.14(a).

To further "discourage existing polluters from increasing their pollution levels up to these limits, or encourage new polluters to minimize their emissions," the Clean Air Amendments of 1977 added the "New Source Review" ("NSR") program. *Nat'l Parks Conservation Ass'n v. Tenn. Valley Auth.*, 480 F.3d 410, 412 (6th Cir. 2007). The NSR included the Prevention of Significant Deterioration ("PSD") control scheme, which "aimed at giving added protection to air quality in certain parts of the country 'notwithstanding attainment and maintenance of' the NAAQS.'" *Duke Energy Corp.*, 549 U.S. at 567-68 (quoting 42 U.S.C. § 7470(1)). Under PSD, each SIP must "'contain emission limitations and such other measures as may be necessary . . . to prevent significant deterioration of air quality' by new sources of pollution or old sources that have undergone modifications." *Nat'l Parks Conservation Ass'n*, 480 F.3d at 412 (quoting 42 U.S.C. § 7471) (omission in original). As a result, "PSD permits" are needed before "construction" of a "major emitting facility." 42 U.S.C. § 7475(a). For purposes of the PSD control scheme, "[t]he term 'construction' when used in connection with any source or facility, includes the modification (as defined in section [7411(a)] of this title) of any source or facility." 42 U.S.C. § 7479(2)(C). "In other words, the 'construction' requiring a PSD permit under the statute was

made to include (though it was not limited to) a 'modification' as defined in the statutory NSPS provisions." *Duke Energy Corp.*, 549 U.S. at 568.

As a "SIP-approved" or "authorized" state, Tennessee has implemented its own PSD regulations through the Tennessee Air Pollution Control Rules ("TAPCR").[2] [*See* Docs. 129-4; 136-6.] The "construction permit" regulation, TAPCR § 1200-3-9-.01(1), provides that "[n]o person shall begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source." [Doc. 129-4 at 2.] The "Prevention of Significant Air Quality Deterioration" provision, TAPCR § 1200-3-9-.01(4)(a)(2), further states that "[t]he requirements of this paragraph shall only apply to a proposed major stationary source, or major modification with respect to any pollutant which is emitted in significant amounts, or would result in a significant net emissions increase of the pollutant respectively." [Docs. 129-4 at 3; 136-6 at 1.] The Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(2), also provide:

> "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under this Division 1200-3.

[2]According to Defendant, the copy of Tennessee regulations submitted as an exhibit in this case [Doc. 129-5] are those that were "in effect at the time of the activities at issue in this proceeding took place in 1988." [Doc. 129-3 at 4.] Plaintiffs have also submitted a copy of the Tennessee regulations. [Doc. 136-7.]

[Docs. 129-4 at 5; 136-6 at 4.] Thus, undergoing the PSD permitting process is required under the Tennessee regulations when there is a "major modification" of an existing facility. Furthermore, the Tennessee regulations, TAPCR §1200-3-9-.01(4)(j)(3), provide:

> A major modification shall apply best available control technology for any pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change and/or change in the method of operation in the unit.

[Docs. 129-4 at 18; 136-6 at 19.] Notably, both parts of the "major modification" definition - any physical change and a resulting increase in emissions - must be satisfied before a project will be considered a "major modification."

In the present case, Plaintiffs contend that the 1988 economizer and superheater projects resulted in a "major modification" of Bull Run and, as a result, Defendant TVA is liable for failing to comply with the relevant PSD requirements. Defendant TVA contends that there is no liability in this case because no "major modification" occurred as a result of the 1988 projects. First, Defendant TVA contends that no physical change occurred because the 1988 projects constituted "routine maintenance, repair and replacement." Second, Defendant TVA contends that even if a "physical change occurred," no significant net emissions increase resulted. Thus, the meaning of terms within the "major modification" definition is central to the pending motions for summary judgment.

C. Routine Maintenance, Repair and Replacement

After defining "major modification" as involving "any physical change," the Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(2)(i)(I), state that "[a] physical change

or change in the method of operation shall not include: (I) Routine maintenance, repair and replacement." [Docs. 129-5 at 5; 136-7 at 4.] In this case, Defendant TVA contends that the 1988 economizer and superheater projects constituted routine maintenance, repair and replacement ("RMRR") and were, therefore, not "major modifications" that necessitated undergoing the PSD permitting process. Plaintiffs contend that the 1988 projects were not RMRR because it is only applicable to the limited category of *de minimis* changes.

As an initial matter, the parties dispute which of them bears the burden of proving that the 1988 projects were RMRR. Plaintiffs contend that Defendant TVA has the burden to demonstrate RMRR because it is an affirmative defense. Defendant TVA contends that because the RMRR provision is part of the TAPCR's definition of "physical change," it is part of Plaintiffs' prima facie case, not an "exemption" or "exception" that Defendant TVA is required to prove. Generally, the party claiming the benefits of an exception to the prohibition of a statute has the burden of proof. *United States v. First City Nat'l Bank of Houston*, 386 U.S. 361, 366 (1967). In *United States v. E. Ky. Power Coop., Inc.*, a defendant raised the "definitional" argument relied on by Defendant TVA in this case. 498 F. Supp. 2d 976, 994 (E.D. Ky. 2007). While recognizing the Seventh Circuit's distinction between an exception to a statutory prohibition and an exclusion from a statutory definition, *E.E.O.C. v. Chicago Club*, 86 F.3d 1423, 1429-31 (7th Cir. 1996), the district court in *E. Ky. Power Coop., Inc.*, also noted that the Seventh Circuit distinguished between "exceptions to statutory regimes and exclusions from the *class of entities defined as within the reach of a statutory regime*." *E. Ky. Power Coop.*, 498 F. Supp. 2d at 995 (quoting *Chicago Club*, 86

F.3d at 1430) (emphasis in original). Because there was no question that the defendant was subject to the CAA, the district court found that "[t]he only question here is whether [defendant's] activities are exempted from the CAA's statutory regime." *E. Ky. Power Coop.*, 498 F. Supp. 2d at 995. The district court then proceeded to reject the "definitional" argument because "there is no reason that the general rule should not apply." *Id.* Other district courts have reached a similar conclusion. *See United States v. Ohio Edison Co.*, 276 F. Supp. 2d 829, 856 (S.D. Ohio 2003); *United States v. Cinergy*, 1:99-CV-1693LJMVSS, 2006 WL 372726, at *4 (S.D. Ind. Feb. 16, 2006). After careful consideration, the Court agrees with the district courts who have followed the general rule that the burden of proof is on the party seeking the benefit of the RMRR exclusion as an exception. In particular, Defendant TVA has not sufficiently provided a reason why the general rule should not apply. Thus, Defendant TVA bears the burden of proof as to the applicability of the RMRR exception in this case.

For the RMRR analysis, the parties generally agree that the Court should consider four central factors: (1) a project's nature and extent; (2) its purpose; (3) its frequency; and (4) its cost. *See Wis. Elec. Power Co. v. Reilly*, 893 F.2d 901, 910 (7th Cir. 1990) [hereinafter *WEPCO*]. It is noted that no single factor has dispositive weight. *United States v. Cinergy*, 495 F. Supp. 2d 892, 901 (S.D. Ind. 2007). The *WEPCO* factors are derived from an EPA memorandum by Don R. Clay ("Clay Memorandum"), which addressed the EPA's considerations when determining whether a project was "routine." [Doc. 129-76 at 4 ("In determining whether proposed work at an existing facility is 'routine,' EPA makes a case-by-

case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding.").] In their initial briefs, the parties presented the Court different standards with regard to determining "routineness." Defendant TVA contended that a "routine in the industry" standard is applicable, while Plaintiffs cited to a district court case that adopted the alternative "routine to the unit" standard. [Docs. 134 at 36-41; 136 at 31.] In its responsive brief, Plaintiffs expressed their agreement with Defendant TVA that "in order to determine whether a project is routine, that project must be compared to projects that are routinely performed in the source category." [Doc. 144-12 at 27.] However, Plaintiffs disagreed with Defendant TVA's arguments that the Bull Run projects met this standard for purposes of the RMRR exclusion and then later referenced to cases relying on the unit standard in support of their RMRR analysis. Thus, the parties have expressed at least some disagreement over the applicable standard for the RMRR exclusion

The Court notes that other district courts have not uniformly adopted either a unit or industry standard for purposes of the RMRR exclusion. For instance, in *E. Ky. Power Coop., Inc.*, the district court held that "it will ultimately determine whether [defendant's] projects fall under the RMRR exclusion by applying the *WEPCO* multi-factor test - nature and extent, purpose, frequency, and cost - with reference to the industry as a whole, not just the particular . . . unit at issue." 498 F. Supp. 2d at 993; *see also United States v. Cinergy Corp.*, 495 F. Supp. 2d 909, 930-31 (S.D. Ind. 2007) (finding that "the frequency factor includes a consideration of how frequently a type of repair or replacement is done at a particular unit

as well as how frequently it is done within the industry"); *United States v. Ala. Power Co.*, 372 F. Supp. 2d 1283, 1306 (N.D. Ala. 2005); *Pa., Dep't of Envtl. Protection v. Allegheny Energy, Inc.*, No. 02:05cv885, 2008 WL 4960090, at *8 (W.D. Pa. Nov. 18, 2008); *United States v. Ala. Power Co.*, Case No. 2:01-cv-00152-VEH, 2008 U.S. Dist. LEXIS 58866, at *55 (N.D. Ala. July 24, 2008). However, in *Ohio Edison Co.*, the district court favored the "routine to the unit" standard because it viewed the "types of activities undertaken within the industry as a whole [as] hav[ing] little bearing on the issue if an activity is performed at a unit only once or twice in the lifetime of that particular unit." 276 F. Supp. 2d at 856; *see also Sierra Club v. Morgan*, No. 07-C-251-S, 2007 WL 3287850, at *12 (W.D. Wis. Nov. 7, 2007) (quoting *Ohio Edison Co.*, 276 F. Supp. 2d at 931).

After reviewing these cases and considering the parties' arguments, the Court is persuaded by the reasoning of those courts that have adopted the "routine in the industry" standard. In the *WEPCO* case, there was discussion of this "highly unusual, if not unprecedented, and costly project" and how "WEPCO did not identify, and the EPA did not find, even a single instance of renovation work at any electric utility generating station that approached the Port Washington life extension project in nature, scope or extent." *WEPCO*, 893 F.2d at 911. This inquiry essentially compares the unit with others in the industry. Other guidance provided by the EPA also suggests the appropriateness of the "routine in the industry" standard. In 1992, the EPA clarified that "the determination of whether the repair or replacement of a particular item of equipment is 'routine' under the NSR regulations, while made on a case-by-case basis, must be based on the evaluation of whether that type of

equipment has been repaired or replaced by sources within the relevant industrial category." WEPCO Rule, 57 Fed. Reg. 32,314, 32,326 (July 21, 1992). [*See* Doc. 129-95 at 15.] Though the 1988 projects at Bull Run predate the *WEPCO* decision and the subsequent so-called WEPCO rule, the Court finds them persuasive on the issue of RMRR, particularly since the parties apply the *WEPCO* factors in their analyses of the issue. The Court is also persuaded by the reasoning in cases like *E. Ky. Power Coop.*, 498 F. Supp. 2d at 993, that have found the industry standard as appropriate for the RMRR analysis. A "routine to the industry" standard is also consistent with the RMRR analysis, which requires a case-by-case determination that weighs the nature, extent, purpose, frequency, and cost of the work. *WEPCO*, 893 F.2d at 910. The Court emphasizes that comparison with others in the industry is just one of a number of factors considered in the RMRR analysis. In other words,

> This does not mean that a particular project will be considered routine simply because it has been performed by another entity within the industry. The test does not turn on whether a particular replacement project has *ever* occurred in the industry or even necessarily the number of times it occurred within the industry. Rather, the Court will consider all of the *WEPCO* factors, including frequency, taking into consideration the work conducted at the particular . . . unit, the work conducted by others in the industry, and the work conducted at other individual units within the industry.

E. Ky. Power Coop, 498 F. Supp. 2d at 993-94 (emphasis in original). With this standard in mind, the Court now proceeds to determine whether summary judgment is appropriate on the issue of RMRR.

Under the factor for the nature and extent of the work, Defendant TVA performed two projects at Bull Run during the 1988 planned outage: (1) the replacement of all economizer

tube elements in both the A and B furnaces (hereinafter referred to as the "economizer project") and (2) the replacement of about three-quarters of the tubing in the finishing superheater for each boiler (hereinafter referred to as the "superheater project"). For the economizer project, Defendant TVA relies on the declaration and report of its opinion witness, Mr. Golden, to establish the applicability of the RMRR exclusion. According to Mr. Golden, the nature and extent of the project was to "resolve an anticipated reliability problem at the unit" and involved replacement of equipment that performed the same purpose and function as the original equipment. [Doc. 129-33 at 5-6.] In support of their position, Plaintiffs point to the removal and replacement of over 67 miles of two-inch diameter tubing from the economizers in both furnaces. For the superheater project, Mr. Golden found the nature and extent of the project akin to other maintenance repair and replacement activities because it was developed to resolve an ongoing, long-term reliability problem and was limited to replacement of equipment that performed the same purpose and function. [Doc. 129-33 at 7-8.] Countering Defendant TVA's RMRR argument, Plaintiffs point to the removal and replacement of 58,000 feet of finishing superheater tubing and the upgrade in the superheater tubing material. Plaintiffs also contend that the required approval by Defendant TVA's Board of Directors for both projects weigh in favor of not considering the projects as RMRR.

As for purpose, Mr. Golden found that the economizer project was a predictive maintenance activity performed to avoid future forced or maintenance outages and was intended to reduce maintenance costs. [Doc. 129-33 at 6.] For the superheater project, Mr.

Golden claimed the purpose was preventative maintenance performed to avoid future forced outages and to reduce maintenance costs. [Doc. 129-33 at 8.] In its Responses to Plaintiffs' First Request for Admissions, Defendant TVA admitted that "if it had not performed the projects and instead had undertaken only piecemeal replacement of tubes as the tubes failed, there probably would have been reductions in availability (based on the predictions in the separate work orders) until all the tubes had been repaired or replaced." [Doc. 136-10 at 18.]

As for frequency, Mr. Golden, relying on his own survey and others, found that there were 11 total or partial economizer replacements in Defendant TVA's system between 1977 and 1988. Mr. Golden also identified 98 economizer replacements by 2000 after analyzing data from over 219 generating units. [Doc. 129-33 at 6-7.] As for Bull Run, Plaintiffs point to the fact that Defendant TVA had never replaced in one project all of the economizer elements prior to 1988. [Doc. 136-10 at 26.] For the superheater project, Mr. Golden found that there were 123 total or partial superheater replacements in Defendant TVA's system between 1977 and 1988. Additionally, he found that there had been eleven replacements of sections of steam and water tubing at Bull Run during the same period and that there were 293 superheater replacements by 2000 according to data analyzed by Mr. Golden from over 219 generating units. [Doc. 129-33 at 6.] In supporting their position, Plaintiffs point to the absence of a fixed schedule for replacing the economizer and finishing superheater elements at Bull Run. [Doc. 136-10 at 28.]

For the economizer project, the cost of the project was $6,456,599.14 in 1988 dollars, or $9.50 per kW in 2000 dollars. According to Mr. Golden, this project cost less than 121

projects performed in Defendant TVA's system and less than six projects performed at Bull Run during the period between 1977 and 1988. [Doc. 129-33 at 6.] For the superheater project, the cost was $1,846,680.59 in 1988 dollars, or $2.70 per kW in 2000 dollars as calculated by Mr. Golden. According to Mr. Golden, the project cost less than 421 capital projects performed in Defendant TVA's system between 1977 and 1988 and less than twenty-two other capital projects performed at Bull Run during the same period. [Doc. 129-33 at 8.] To support its position on the RMRR issue, Plaintiffs point to Defendant TVA's classification of both projects as capital expenditures under the accounting rules followed by Defendant TVA. [Doc. 136-10 at 15.] Plaintiffs also rely comparisons of the combined cost of the projects, approximately $8,299,000, to what Defendant TVA spent for all plant-wide maintenance during the fiscal years of 1980 through 1987. [Docs.136-12; 136-13; 136-14; 136-15; 136-16; 136-17; 136-18.]

The parties contend that the Court can rule on the RMRR issue as a matter of law. They state that the facts surrounding the economizer and superheater projects are not in dispute, so the Court should resolve this issue on summary judgment. However, as the above discussion demonstrates, there are facts favorable to both sides. The Supreme Court has recognized that there remains a question for the finder of fact if "reasonable minds could *differ* as to whether a preponderance of the evidence establishes the facts of a prima facie case." *St. Mary's Honor Ctr. v. Hicks*, 509 U.S. 502, 509-10 (1993) (emphasis in original). In this case, Plaintiffs contend that the 1988 projects were not *de minimis*, so the RMRR issue can be resolved in their favor. However, as discussed above, a multi-factor, fact-

intensive inquiry is needed to make this determination. In light of the evidence discussed above, reasonable minds could differ on whether the RMRR exclusion applies to the work performed during the 1988 outage. As a result, the Court must weigh the evidence to resolve the RMRR issue. Thus, the Court finds that neither side has established as a matter of law the applicability or non-applicability of the RMRR exclusion given the specific facts in this case. Accordingly, the Court will deny the motions of Plaintiffs and Defendant TVA to the extent they respectively seek summary judgment on the RMRR issue.

D. Resulting Emissions Increase

In addition to the applicability of the RMRR exclusion, the parties also dispute whether there was a resulting "significant net emissions increase of any pollutant subject to regulation under this Division 1200-3," as provided by the definition of "major modification" in the Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(2). [Docs. 129-4 at 5; 136-6 at 4.] In support of its motion for summary judgment, Defendant TVA contends that Plaintiffs cannot prove an emissions increase nor establish that the 1988 economizer and superheater project caused a significant net emissions increase. In support of their motion for summary judgment, Plaintiffs contend that they have established the requisite emissions increase as provided by the Tennessee regulations.

The Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(4)(i), provide the following definition:

> "Net emissions increase" means the amount by which the sum of the following exceeds zero:

> (I) Any increase in actual emissions from a particularly physical change or change in the method of operation at a stationary source; and
>
> (II) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

[Docs. 129-4 at 6; 136-6 at 5.] The Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(22), further state:

> "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with subparts (i)-(iii) below.
>
> (i) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Technical Secretary may allow the use of a different time period upon a determination that is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
>
> (ii) The Technical Secretary may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
>
> (iii) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

[Docs. 129-4 at 9-10; 136-6 at 10.] Thus, the determination of a "net emissions increase" requires calculation of emissions both before and after a project. In the present case, the parties dispute how to make this determination.

The parties do not dispute that the Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(22)(i), provide a method for calculating pre-project actual emissions or "baseline emissions." [Docs. 129-4 at 10; 136-6 at 10.] Under the regulations, actual emissions before

a project "shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation." *Id.* However, they do dispute whether the two-year period must immediately precede the project date. Like TAPCR § 1200-3-9-.01(4)(b)(22)(i), the applicable federal regulations for the 1980 rule, in force during the relevant period in this case, provide that baseline emissions "shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation." 40 C.F.R. § 52.21(b)(21)(ii). Notably, "[u]nder the 1980 rule, sources determined past actual emissions by averaging their annual emissions during the two years immediately prior to the change, though they could use either different, more representative periods or source-specific allowable emissions levels, if they could convince the permitting authorities." *New York v. United States E.P.A.*, 413 F.3d 3, 16 (D.C. Cir. 2005); *see also* WEPCO Rule, 57 Fed. Reg. at 32,323 ("Although not required by the regulations, EPA has historically used the 2 years immediately preceding the proposed change to establish the baseline [see 45 FR 52676, 52705, 52718 (1980)]. However, in some cases it has allowed the use of earlier periods.") [*See* Doc. 129-95 at 12.] The 1992 WEPCO Rule changed the presumption so that "any 2 consecutive years within the 5 years prior to the proposed change is representative of normal source operations for a utility." WEPCO Rule, 57 Fed. Reg. at 32,323. [*See* Doc. 129-95 at 12.] Thus, the 24 months immediately preceding the physical change has been used to calculate baseline emissions for activities before the issuance of the WEPCO Rule on July

21, 1992. *See Ohio Edison Co.*, 276 F. Supp. 2d at 864. In the present case, the subject projects occurred prior to July 21, 1992, and no determination was made by permitting officials to use a different, more representative period. When the facts are construed in a light most favorable to Plaintiffs, the two-year period immediately preceding the 1988 projects is appropriate for calculating baseline emissions under the relevant regulations. When the facts are construed in a light most favorable to Defendant, another period prior to the 1988 projects may be more "representative." As a result, this issue could be resolved in favor of either party and raises a genuine issue of material fact on summary judgment.

The parties also dispute how emissions after the superheater and economizer projects should be calculated. Defendant TVA contends that "actual-to-actual test" is applicable in this case because the pre-project and post-project "actual emissions" are now known. In *Ohio Edison*, the district court rejected this argument because the CAA "clearly mandates that an electric utility performing a non-exempt physical change must make a calculation as to the potential emissions increase that would result from the change" and "clearly requires that this calculation be made by the electric utility before the physical change is actually undertaken." *Ohio Edison Co.*, 276 F. Supp. 2d at 865. The district court concluded that despite the existence of actual data as to the resulting emissions, "the law does not permit an after-the-fact analysis of the effect of a plant modification, which otherwise was required by law to obtain a pre-construction permit." *Id.* The Tennessee regulations, TAPCR § 1200-3-9-.01(1), echo this need for a pre-construction emissions analysis in prohibiting construction "without first having applied for and received from the Technical Secretary a construction

permit for the construction or modification of such air contaminant source." [Doc. 129-4 at 2.] Considering "actual" post-project data would be inconsistent with the purposes of the CAA and the relevant Tennessee regulations. Thus, the actual-to-actual test and evidence to the extent based on such a test is irrelevant in this matter.

Plaintiffs contend that the applicable test is an "actual-to-potential" test, where post-project emissions are based on the "potential to emit." The Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(22)(iii), state that "[f]or any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date." [Docs. 129-4 at 10; 136-6 at 10.] The regulations, TAPCR § 1200-3-9-.01(4)(b)(5), define "potential to emit" as "the maximum capacity of [Bull Run] to emit a pollutant under its physical and operational design." [Docs. 129-5 at 7; 136-7 at 6.] Plaintiffs contend that Bull Run had "not begun normal operations" at the time of the 1988 planned outage because it had not yet operated after the economizer and superheater projects. They argue that it is impossible for a modified unit to have historic operations because "actual emissions" are limited to the three definitions provided in the Tennessee regulations, TAPCR § 1200-3-9-.01(4)(b)(22). [Docs. 129-4 at 10; 136-6 at 10.] At least one district court has applied the "actual-to-potential to emit" test, reasoning that "when a major emitting source undergoes a physical change, as opposed to routine maintenance, the modified source does not begin 'normal operations' until the change is complete requiring application of the 'actual to potential test.'" *Sierra Club v. Morgan*, No. 07-C-251-S, 2007 WL 3287850, at *18 (W.D. Wis. Nov. 7, 2007).

However, the reasoning employed by the district court in *Morgan* was previously questioned by the Seventh Circuit in the *WEPCO* decision. In *WEPCO*, the Seventh Circuit, interpreting federal regulations almost identical in wording to the Tennessee regulations, rejected the actual-to-potential test for like-kind replacements because it required "circular" reasoning:

> [I]n order to demonstrate that the Port Washington like-kind replacement project constitutes a modification, the EPA applies the potential to emit concept (to show an increase in emissions). And in order to apply the potential to emit concept to like-kind replacement, the EPA assumes that the plant is a "modified" unit . . . . [W]e cannot defer to agency interpretations that, as applied here, appear to assume what they seek to prove.

WEPCO, 893 F.2d at 917. The *WEPCO* court further found "no support in the regulations for the EPA's decision wholly to disregard past operating conditions at the plant." *Id.* After the *WEPCO* decision, the WEPCO Rule discussed the proper air emissions methodology as an "actual-to-future actual projection," which is the product of:

> (1) The hourly emissions rate, which is based on the unit's physical and operational capabilities following the change and federally-enforceable operational restrictions that would affect the hourly emissions rate following this change; and (2) projected capacity utilization, which is based on (a) the unit's historical annual utilization, and (b) all available information regarding the unit's likely post-change capacity utilization.

WEPCO Rule, 57 Fed. Reg. at 32,323. [*See* Doc. 129-95 at 12.] In *Ohio Edison Co.*, the district court agreed that "any use of the actual to potential to emit test is not legally supportable." 276 F. Supp. 2d at 862. In light of the circular reasoning concerns raised in *WEPCO* and the EPA's subsequent adoption of the an actual-to-future actual projection test, the Court is reluctant to apply the actual-to-potential to emit test. However, either under a

potential or projected future actual test, Plaintiffs have presented sufficient evidence of post-project emissions to avoid summary judgment in favor of Defendant TVA on the resulting air emissions issue. Under the Tennessee Regulations, TAPCR TAPCR § 1200-3-9-.01(4)(b)(24)(i)(II), (III), "significant" emissions are 40 tons per year for nitrogen oxide (NO_x) and 40 tons per year for sulfur dioxide (SO_2). [Docs. 129-4 at 10; 136-6 at 10.] For nitrogen oxide emissions, Plaintiffs' opinion witness, Mr. Koppe, calculates an increase of 6,101 tons per year under a potential to emit test, 157 tons per year under projected future actual test for the superheater project, and 111 tons per year under a projected future actual test for the economizer project. [Doc. 136-20 at 58.] For sulfur dioxide emissions, he calculates an increase of 107,068 tons per year for a potential - permit limit test; 20,986 tons per year under a potential - highest sulfur test; 387 tons per year under a projected future actual test for the superheater project; and 274 tons per year under a projected future actual test for the economizer project. [Doc. 136-20 at 59.] All of these calculations exceed the 40 tons per year threshold provided by the Tennessee Regulations, precluding summary judgment in favor of Defendants when viewing this evidence in a light most favorable to Plaintiffs. However, because among other issues, the issue of the baseline emissions calculation remains, summary judgment in favor of Plaintiffs on the air emissions issue is equally inappropriate.

Defendant TVA also contends that Plaintiffs have not established a causal link between the alleged "physical change" and the contend emissions increase as a matter of law.

This "causal link" is provided by the CAA's statutory definition of "modification," which states:

> The term "modification" means any physical change in, or change in the method of operation of, a stationary source *which increases* the amount of any air pollutant emitted by such source or *which results* in the emission of any air pollutant not previously emitted.

42 U.S.C. § 7411(a)(4) (emphasis added). *See New York*, 413 F.3d at 32-33 (describing the lack of challenge to the EPA's interpretation of this statutory language as requiring "a causal link between the proposed change and any post-change increase in emissions). The WEPCO Rule excludes "that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole." WEPCO Rule, 57 Fed. Reg. at 32,337 [*See* Doc. 129-95 at 26.] However, if "it can be shown that the increase is related to the changes made to the unit, then emissions increases resulting from the increased operation must be attributed to the modification project." *New York*, 413 F.3d at 33. Though the *New York* court's demand growth exclusion discussion was focused on non-utilities previously unable to take advantage of the exclusion prior to the 2002, it nonetheless provides guidance for the present case since the same exclusion was already applicable to utilities at the time of the *New York* court's decision.

In the present case, Plaintiffs have presented evidence that improvements due to the economizer and superheater projects would result in fewer outages and, therefore, would

increase Bull Run's emissions. [*See* Docs. 129-44 at 4; 136-19 at 53.] However, Defendant TVA has presented evidence that Bull Run had the capability to emit more than what was actually emitted during what it contends was the representative baseline period. [*See* Doc. 136-20 at 25.] To the extent Defendant TVA relies on evidence of an actual greater demand after the 1988 projects, such reliance may be misplaced since the post-project actual emissions test is not applicable to this matter for the reasons already given. In other words, the inquiry is whether Defendant TVA's prediction that it did not need a permit was "reasonable" under the circumstances existing before the projects in 1988. *Allegheny Energy*, 2008 WL 4960090, at *7.

In any event, and in light of the evidence presented by both sides, the Court finds that there remains a question for the finder of fact because "reasonable minds could differ" on whether there was a resulting emissions increase from the economizer and superheater projects. *Hicks*, 509 U.S. at 509-10 (emphasis removed). To resolve the causation issue, the Court must weigh the evidence presented by both sides and resolve the representative baseline issue which is inappropriate on summary judgment for the reasons already discussed. Accordingly, the Court will deny the motions of Plaintiffs and Defendant TVA to the extent they respectively seek summary judgment on the resulting increase in emissions issue.

F. Fair Notice

In support of its motion for summary judgment, Defendant TVA also raises a fair notice argument. First, it contends that the case should be dismissed because of the

contemporaneous interpretation of the Tennessee regulations by the Tennessee Department of Environment and Conservation regarding the RMRR exclusion and air emissions tests. Second, Defendant TVA contends that the EPA changed regulatory definitions since the 1988 projects, so Defendant TVA did not have fair notice of its obligations under the CAA and relevant regulations. Defendant TVA bears the burden of establishing such a lack of notice as an affirmative defense to liability. *Ohio Edison Co.*, 276 F. Supp. 2d at 886.

In support of the argument based on contemporaneous TDEC interpretations, Defendant TVA relies on the declaration of Barry F. Stephens ("Mr. Stephens"), the director of TDEC's Air Division. [Doc. 129-2 at 3.] In his declaration, Mr. Stephens states:

> Consistent with its NSPS origin, the PSD program under TDEC's regulations excludes increases in operating hours or production rates at existing sources. If increases in operating hours are excluded, emissions can "increase" on an annual basis for purposes of PSD only when a project increases a source's short-term emission rate (pounds per hour or kilograms per hour). That is, if a source's hourly emission rate has not increased as a result of a project, but the source's total yearly emissions have increased after a project, the only reason those yearly emissions will have increased is that the source operated more hours than it did in previous years and this is excluded under TDEC's regulations.

[Doc. 129-2 at 10.] In *Duke Energy Corp.*, the Supreme Court rejected a similar interpretation of the relevant regulations by the EPA's Director of the Division of Stationary Source Enforcement, Edward E. Reich. 549 U.S. at 580-81. Notably, the Supreme Court recognized that "an isolated opinion of an agency official does not authorize a court to read a regulation inconsistently with its language." *Id.* at 580-81. Thus, the interpretation of Mr. Stephens is not necessarily dispositive. Furthermore, Plaintiffs have presented the

declaration of David G. Carson ("Mr. Carson"), a former supervisor in TDEC, which states Mr. Carson's different interpretation of the relevant regulations from that of Mr. Stephens. [*See* Doc. 144-5.] To the extent that the interpretations of Mr. Carson and Mr. Stephens conflict, the Court finds that it cannot resolve this issue on summary judgment.

While the Supreme Court left open the issue of whether the EPA has taken inconsistent positions on how to construe the PSD "modification" requirements, *Duke Energy Corp.*, 549 U.S. at 581-82, other district courts have addressed the fair notice argument. In evaluating the fair notice argument, the "inquiry is taken from the perspective of the regulated party (not the agency), and analyzes whether the party could have predicted the agency's interpretation of the regulation at the time of the conduct at issue." *United States v. S. Ind. Gas and Elec. Co.*, 245 F. Supp. 2d 994, 1011 (S.D. Ind. 2003). Factors for consideration include the plain language of the regulation, public statements by the agency, consistency of public statements, an agency's pre-enforcement efforts to bring about compliance, confusion within the enforcing agency as to the proper interpretation of a regulation, and whether or not a confused defendant makes inquiry about the meaning of the regulation at issue is relevant. *Id.* at 1011. Thus, courts may consider a number of factors in determining whether a defendant lacked fair notice.

In *Cinergy Corp.*, the district court addressed the fair notice arguments raised by Defendant TVA in the present matter regarding emission increases. 495 F. Supp. 2d at 906-09. The *Cinergy Corp.* court noted that regardless of the exact methodology for calculating emissions increases, "the real question presented was whether the defendant should have

anticipated that its projects would cause a substantial increase in emissions." *Id.* at 906 (discussing *Ohio Edison Co.*, 276 F. Supp. 2d at 878). Thus, as long as the defendant "was aware of the regulatory standards for determining whether a project may result in significant increases in emission, its understanding of the exact mathematical formula is irrelevant." *Id.* The *Cinergy Corp.* court focused on the plain language of the applicable regulations that "actual emissions" are measured "in tons per year" by using the unit's actual operating hours and production rates. *Id.* at 907 (quoting 40 C.F.R. § 52.21(b)(21)(ii)). The Tennessee regulations have the same "in tons per year" language in defining "actual emissions." TAPCR § 1200-3-9-.01(4)(b)(22). [Docs. 129-5 at 10; 136-7 at 10.] Thus, as in *Cinergy Corp.*, the plain language of the Tennessee regulations indicated an annual, rather than hourly, methodology for determining a "major modification." Another factor weighing against finding a lack of fair notice is the failure of Defendant TVA to inquire about the meaning of the regulations before undertaking the 1988 projects, unlike the utility in *WEPCO*. Nevertheless, Defendant TVA has presented at least some evidence of inconsistent positions by the EPA.

In light of these contradicting factors, the Court will not resolve the fair notice issue on summary judgment. However, the Court will consider such argument at trial should Defendant TVA raise fair notice as an affirmative defense at trial.

III. CONCLUSION

For the reasons set forth herein, Plaintiff's Motion for Summary Judgment [Doc. 135] and Defendant's Motion for Summary Judgment [Docs. 129] are hereby **DENIED**.

IT IS SO ORDERED.

s/ Thomas A. Varlan
UNITED STATES DISTRICT JUDGE