

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF INDIANA
INDIANAPOLIS DIVISION

UNITED STATES OF AMERICA,)
Plaintiff,)
)
STATE OF NEW YORK, STATE OF NEW)
JERSEY, STATE OF CONNECTICUT,)
HOOSIER ENVIRONMENTAL COUNCIL,)
and OHIO ENVIRONMENTAL COUNCIL,)
Plaintiff-Intervenors,)
)
vs.) 1:99-cv-1693-LJM-JMS
)
CINERGY CORP., PSI ENERGY, INC., and)
THE CINCINNATI GAS & ELECTRIC)
COMPANY,)
Defendants.)

ORDER ON MOTIONS
FOR PARTIAL SUMMARY JUDGMENT REGARDING THE APPLICATION OF
THE ROUTINE MAINTENANCE REPAIR AND REPLACEMENT EXCLUSION
AT BECKJORD, CAYUGA, GALLAGHER, GIBSON, AND MIAMI FORT PLANTS

This cause is before the Court on various motions for partial summary judgment filed by the plaintiff's, United States of America ("USA"), and the plaintiff-intervenors, State of New York, State of New Jersey, State of Connecticut, Hoosier Environmental Council, and Ohio Environmental Council (both the plaintiff and the plaintiff-intervenors collectively, "Plaintiffs"). Specifically, Plaintiffs seek a ruling that various construction activities conducted by the defendants, Cinergy Corp., PSI Energy, Inc. ("PSI"), and the Cincinnati Gas & Electric Company ("CG&E") (all three defendants collectively, "Cinergy"), at Beckjord, Cayuga, Gallagher, Gibson, and Miami Fort plants do not fall within the narrow range of activities excluded from pollution control requirements by the

routine maintenance, repair or replacement (“RMRR”) exclusion of the Clean Air Act (“CAA”).¹ Cinergy contends that partial summary judgment is inappropriate because there are genuine issues of material fact about whether Cinergy’s projects were “routine,” and therefore the question of whether the projects qualify for the RMRR exclusion must be submitted to a jury for its consideration. The parties have fully briefed the pending motions and they are now ripe for ruling.

For the reasons stated herein, Plaintiffs’ motions for partial summary judgment are **GRANTED.**²

I. PRELIMINARY EVIDENTIARY CONSIDERATIONS

As an initial matter, Plaintiffs take issue with some of Cinergy’s exhibits, arguing that the exhibits are not admissible. Specifically, Plaintiffs reference (1) Cinergy’s Joint Exhibit 128, a report issued by the Tennessee Valley Authority (“TVA”) and referred to as “the Golden Report”; (2) Cinergy’s Joint Exhibits 96A through 96I, and Cinergy’s Miami Fort Exhibit 14a, summary reports from Cinergy’s maintenance databases; (3) Cinergy’s Joint Exhibits 76 and 81 through 87,

¹ The RMRR exclusion was promulgated by the Environmental Protection Agency (“EPA”) as a regulatory exemption from the modification provision of the CAA. *See* 40 C.F.R. § 52.21(b)(2)(iii)(a) (for the Prevention of Significant Deterioration (“PSD”) program); 40 C.F.R. § 60.14(e) (for the New Source Performance Standard (“NSPS”) program). *See also* 42 U.S.C. § 7411(a)(4) (defining “modification”).

² Even though the recent appellate opinion could be read to suggest that Cinergy has conceded that its changes were not routine, *see United States v. Cinergy*, 458 F.3d 705, 708 (7th Cir. 2006), *cert. denied*, --- U.S. ---, 127 S. Ct. 2034 (2007), Cinergy has not withdrawn its arguments. Moreover, in light of the fact that Cinergy sought to have the appellate opinion modified to remove any concession language, the Court cannot conclude that Cinergy has opted to admit that it conceded this point. Instead, it appears from a review of the oral argument that Cinergy’s appellate counsel was conceding the difficulty with proving that a project fits the RMRR exemption given the narrow definition that has been applied to the meaning of “routine.” Therefore, the Court has opted to address the merits of the instant motions.

“experience lists” or bids from vendors who have supplied or installed replacement components; and (4) Cinergy’s Joint Exhibit 79, a chart prepared by defense counsel of replacement projects at other Cinergy’s facilities that Cinergy claims are similar to the projects at issue in the instant motions for partial summary judgment. The Court interprets Plaintiffs’ arguments as requests to strike the exhibits. As explained below, the Court declines to strike these exhibits at this time and, to the extent that they are relevant, will consider them for purposes of the partial summary judgment motions.³

The first exhibit that Plaintiffs challenge is the Golden Report. The Golden Report contains data gathered from other utilities regarding their maintenance, repair, and replacement activities. *See* Cinergy’s Joint Ex. 128. Of the utilities surveyed, the report concluded that there had been 121% replacement of reheaters, with some facilities replacing that component more than once. *See id.* The Golden Report opined that deterioration of components at some facilities was due to unforeseen problems that arose because of different operating environments and the use of different and cheaper metals, which industry originally thought would be satisfactory. *See id.* Finally, noting that the ages of the facilities that had been required to do reheater repairs ranged from five to forty-four years and that the mean age was 25.1 years, the Golden Report concluded that factors other than age determined the need for replacement. *See id.* The report was printed in the Federal Register. *See* 65 Fed. Reg. 35,154 (2000).

The Court has previously concluded in another case that the Golden Report may be relevant to the issue of whether repair and replacement projects are routine, at least as it bears on the factor

³ While the Court is hesitant to strike the exhibits for purposes of summary judgment, the Court will insist on strict compliance with all of the Federal Rules of Civil Procedure if this case finally proceeds to trial.

of frequency of industry practice. *See United States v. S. Ind. Gas & Elec., Co.*, 245 F. Supp. 2d 994, 1004 n.7 (S.D. Ind. 2003). The Court sees no reason to conclude differently in this case. Plaintiffs nonetheless argue that the Court should exclude the Golden Report from its consideration because the report contains hearsay and was generated solely for the purposes of litigation. The Court finds that the Golden Report is admissible under Federal Rule of Evidence 803(8) pursuant to the public records hearsay exception. Even though the TVA has extensive independence from the federal government, it is still an instrumentality of the United States. *See* 16 U.S.C. § 831. Moreover, even though the TVA has not been granted express statutory authority to conduct the investigation that it did, express statutory authority is not required under the public records exception. *See* MUELLER & KIRKPATRICK, § 8.50 at 1228 (stating that “[e]xpress statutory authority to investigate or make records is not required, and the exception can apply if the agency investigates and reports on matters within its general area of responsibility.”). Here, an investigation into the maintenance practices and projects of other plants within the electric energy industry is within the general area of responsibility given to TVA by Congress. *See* 16 U.S.C. § 831m. Accordingly, the Court concludes that the public records exception applies, and the Court will consider the Golden Report for partial summary judgment purposes.

The second category of materials to which Plaintiffs object are summary reports from Cinergy’s maintenance databases. *See* Cinergy’s Joint Exs. 96A through 96I and Cinergy’s Miami Fort Ex. 14a. Plaintiffs object to these exhibits on the alleged basis that Cinergy failed to comply with its discovery obligations by providing Plaintiffs with a workable copy of the database. Based on the materials submitted by the parties, including various correspondences, the Court is unable to conclude at this stage that Cinergy failed to satisfy its discovery obligations. Further, the Court notes that Cinergy submitted an affidavit discussing the databases and explaining how the

summaries were generated, thereby providing some authentication for the summary reports. *See* White Aff., ¶¶ 11-19. This affidavit was corroborated by another affiant, who indicated that he was familiar with the databases and had reviewed the summary reports. *See* Faulkner Aff., ¶¶ 7-8, 20. Under these circumstances, the Court declines to strike the summary reports.

The third set of materials that Plaintiffs challenge are “experience lists” or bids Cinergy received from outside vendors who have supplied or installed replacement components. *See* Cinergy’s Joint Exs. 76 and 81 through 87. Cinergy failed to respond to Plaintiffs’ objection regarding these materials. *See* Cinergy’s Surreply on Evid. Objs. & New Evid. (Docket No. 842). Nonetheless, the Court is unwilling to strike these materials. As explained more fully below, one of the factors that the Court must analyze in order to determine whether the changes made to Cinergy’s facilities were “routine” is the frequency of repair or replacement of components within the industry. The “experience lists” and bids have some bearing on that factor, and therefore the Court will consider the exhibits.

The final exhibit with which Plaintiffs take issue is a chart prepared by defense counsel of repair and replacement projects at Cinergy facilities. *See* Cinergy’s Joint Ex. 79. Plaintiffs complain that Cinergy has not submitted a sponsoring affidavit for the chart that identifies the source of the chart’s information. However, as Cinergy notes in response, the affidavit of Robert E. Batdorf (“Batdorf”) specifically refers to Joint Exhibit 79. *See* Batdorf Aff., ¶ 37.⁴ Moreover, Batdorf indicates that he participated in generating the chart from Cinergy’s maintenance records that had been provided to Plaintiffs. *See id.*

⁴ Cinergy failed to attach the actual exhibit to Batdorf’s affidavit. Nevertheless, it is apparent that the affidavit incorporates Joint Exhibit 79.

Federal Rule of Evidence 1006 permits the use of summaries of voluminous documents where examination of them in court would be inconvenient and where the documents have been made available to the opposing party. In addition, it is clear that for summary judgment purposes Cinergy has laid a foundation for the underlying documents and that those documents are probably admissible because they arguably are kept in the regular course of business. Therefore, the Court will consider Cinergy's Joint Exhibit 79 in this Order, although the weight to be given to the exhibit may be another issue.

As a final matter, the Court notes that Cinergy has indicated that it preserves all of its objections raised in any deposition that Plaintiffs use in their motions for partial summary judgment. *See* Cinergy's Beckjord Mem. in Opp'n at 2-3 & n.3; Cayuga Mem. in Opp'n at 2, n.3; Gallagher Mem. in Opp'n at 2, n.3; Gibson Mem. in Opp'n at 2, n.3; Miami Fort Mem. in Opp'n at 2, n.4. With respect to two of the facilities at issue in the instant motions, Cinergy has submitted charts noting the basis for its objections to portions of deposition testimony and documents. *See* Cinergy's Beckjord Mem. in Opp'n, Apps. 1 & 2; Miami Fort Mem. in Opp'n, Apps. 1 & 2. In those charts, the basis noted for the objections to deposition testimony are simply things like "vague question," "ambiguous question," "lack of foundation," "outside of the scope" and "lack of foundation" without any further elaboration. *See id.* Likewise, a review of the bases indicated for the objections to certain documents provides scant information, and in most cases Cinergy has simply stated "authenticity" and "hearsay."

The Court concludes that Cinergy has not provided any cogent argument in support of its objections, and the Court will not scour the record to construct or reconstruct Cinergy's objections. Further, with respect to documents, the Court pauses to note that, for summary judgment purposes, admissibility turns on substance or content rather than form. *See Juarez v. Menard, Inc.*, 366 F.3d

479, 484 n.4 (7th Cir. 2004); *Waldridge v. Am. Hoechst Corp.*, 24 F.3d 918, 921 (7th Cir. 1994). More specifically, with respect to Cinergy's Annual Reports,⁵ the Court concludes that those documents would be admissible as either admissions of a party-opponent or as records of regularly conducted activity. *See* Fed. R. of Evid. 801(d)(2) & 803(6). In addition, some of the same information in the Annual Reports to which Cinergy objects is corroborated by, and therefore cumulative of, material that Cinergy has not challenged. *See, e.g.*, Pls.' Beckjord Ex. 56. Finally, it is disingenuous for Cinergy to object to copies of documents that it produced to Plaintiffs pursuant discovery requests. *See, e.g., United States v. Brown*, 688 F.2d 1112, 1115-16 (7th Cir. 1982) (concluding that "act of production was implicit authentication"). Accordingly, the Court will consider the deposition testimony and documents to which Cinergy has objected, at least to the extent that the information is relevant.

II. BACKGROUND

Plaintiff USA initiated this lawsuit against Cinergy alleging, *inter alia*, that Cinergy violated the New Source Review ("NSR") provisions of the CAA when it made physical changes to units at various power plants that constitute "modifications" as that term is defined by 42 U.S.C. § 7411(a)(4). Central to this lawsuit has been the question of whether the changes that Cinergy made to its power plants were modifications or whether those changes fall under the RMRR exclusion.

In opposition to the instant motions, Cinergy has failed to comply with Local Rule 56.1 by specifically indicating which of Plaintiffs' designated facts Cinergy disputes. Instead, Cinergy includes a section in each of its briefs entitled "Statement of Material Facts in Dispute and Material

⁵ In particular, Cinergy takes issue with Plaintiffs' use of CG&E's 1985 and 1986 Annual Reports. *See* Pls.' Exs. 7 and 36.

Facts Omitted,” but a close reading of those “facts” reveals that none of them actually controvert the statement of facts proffered by Plaintiffs. For their part, with the exception of some of Cinergy’s exhibits that Plaintiffs claim are inadmissible and should be struck, Plaintiffs do not dispute Cinergy’s statements of facts. Instead, Plaintiffs accept those statements for the purposes of the instant motions for partial summary judgment, but they contend that those statements are irrelevant and do not result in raising a genuine issue of material fact. Accordingly, the Court will accept as true Plaintiffs’ and Cinergy’s assertions for the purposes of this Order.

With this condition in mind, the Court turns to the underlying background facts for the projects at each of the five plants under consideration in this Order. Additional, relevant facts will be noted in the Discussion below.

A. GENERAL INFORMATION ON LIFE EXTENSION PROJECTS

Cinergy’s plant projects have been labeled “life extension projects” and “refurbishment programs,” or, as Cinergy sometimes states in its briefs, “like-kind replacement” projects. According to CG&E documents, a life extension project “restores the units to their original capacity rating and efficiency” and adds years to the life of a unit. *See* Pls.’ Beckjord Ex. 5. Life extension projects are aimed at “increasing the life of a power plant beyond [its] nominal 35-40 year design life to something greater than 60 years while maintaining [its] efficiency and reliability.” *See* Pls.’ Beckjord Ex. 3.

At a September 1987 industry conference, CG&E announced plans to pursue “a more unique method of life extension.” *See* Pls.’ Beckjord Ex. 11. Specifically, CG&E stated that it had “opted for ‘full’ life extensions” that would be “one-shot refurbishment programs implemented during a single outage.” *See id.* CG&E’s stated goal of these programs was to “restore these existing units

to like-new condition, capable of operating an additional 20-25 years with levels of availability and efficiency similar to the units' original condition." *See id.* CG&E anticipated that these programs would effect "nearly every piece of equipment, component or system on the unit." *See id.* Moreover, CG&E recognized that its life extension projects were unprecedented, specifically stating that "[n]ever before have we attempted to perform such large scopes of work during such short periods of time." *See id.*

According to CG&E documents, CG&E was a pioneer in life extension projects. For example, in its 1985 Annual Report, the company declared that it was "a recognized national industry leader in life extension programs for older generating units. *See* Pls.' Beckjord Ex. 7. In addition, in May of 1985 the company published a story in its official employee newsletter claiming that "[i]deas for life extension originated at CG&E in 1981." *See* Pls.' Beckjord Ex. 8. CG&E also boasted that it was the first company in the utility industry to perform a "complete" or "full" life extension project. *See* Pls.' Beckjord Exs. 5, 9-11. Finally, CG&E claimed that its life extension projects produced "immediate" improvements in the performance parameters of reliability, availability and efficiency, and that the company received "immediate paybacks." *See* Pls.' Beckjord Ex. 11.

B. BECKJORD STATION (UNITS 1, 2, AND 3)

Beckjord Station is a coal-fired power plant located in New Richmond, Ohio. *See* Pulskamp Aff., ¶ 15 (Defs.' Beckjord Ex. 14). The plant is situated on approximately 1500 acres and has six electric generating units. *See id.*, ¶ 20. The plant operates twenty-four hours a day and currently has 160 employees. *See id.* In the mid-1980s, the maintenance staff included certified welders and several mechanics and consisted of approximately sixty-five hourly employees and seven

supervisors. *See* Merk Dep. at 27, 109-110. The routine practices that the employees utilized to address boiler tube leaks and failures were to padweld the tube over the leak, to install a “window weld,” or to replace the damaged area with a “dutchman.” *See* Schipper Dep. at 61-62, 120, 183-84, 190-91. The average annual expenses for boiler and electric plant maintenance at Beckjord during the 1980s were \$2,000,000.00 to \$3,000,000.00 per unit. *See* Pls.’ Beckjord Mem. in Supp. of Mot. for Partial Summ. J. (“Pls.’ Beckjord Mem.”), Attach. A.

The first Beckjord life extension project took place at Unit 3 after a number of major utility contractors hired by CG&E had performed detailed inspections and assessments and after multi-volume planning studies had been prepared. *See* Moreland Dep. at 160, 185; Pls.’ Beckjord Exs. 13, 16. In its 1985 Annual Report, CG&E characterized the unit as having “nearly fulfilled the [thirty-five] year average operating life for coal-fired generating units.” *See* Pls.’ Beckjord Ex. 7 at CGE022282. Unit 3 had been in service since 1954 and was over thirty-one years old by the time its life extension project began. The life extension project was designed to obtain an additional thirty years of service from the unit. *See* Pls.’ Beckjord Ex. 16.

The Unit 3 project resulted in “modifications or replacements” of approximately forty-nine components. *See* Moreland Dep. at 80-81, 88-91; Schipper Dep. at 61-62, 120, 183-84; Pls.’ Beckjord Ex. 11, 17-19. CG&E itself characterized the work as involving “modifications,” “improvements,” “upgrading,” “restor[ation],” “extensive remodeling,” “extensive improvements,” and a “complete overhaul.” *See* Pls.’ Beckjord Exs. 5, 7-9, 24-25. Many components were replaced or refurbished for the first time, and some components were upgraded or even modified. *See* Moreland Dep. at 59-63, 80-81, 88-91; Schipper Dep. at 61-62, 183-84; Pls.’ Beckjord Exs. 11, 17, 18, 19, 23. Virtually all of the components replaced were original equipment that had never been replaced prior to the project and have not been replaced in the twenty years since the project.

Moreland Dep. at 47-54, 57-93; Schipper Dep. at 182-97, 204-13; Pls.' Beckjord Ex. 22. Some of the notable features of the Unit 3 project include removal of the boiler's superheater and two reheater outlet headers from an area about 120 feet above the main floor and the replacement of tubes for the main condenser. *See* Pls.' Beckjord Ex. 10. The smallest of the heating components weighed six tons while the largest weighed twelve tons. *See id.* In addition, CG&E replaced some 10,000 tubes, or about fifty-three miles of tubing, on the main condenser for apparently what was only a small part of the project. *See id.*

Prior to the project, CG&E committed an estimated 39,000 man-hours from its employees on the project, and one of the contractors estimated that it would add an additional 16,500 man-hours from its employees for the project. *See* Moreland Dep. at 160-61. The project at Unit 3 was originally budgeted at over \$15,000,000.00 and, due to the size and cost, had to be approved by the company president. *See* Schipper Dep. at 164-66; Pls.' Beckjord Ex. 26. The project eventually cost \$16,300,000.00 and was funded from a capital construction account rather than from the maintenance budget. *See* Moreland Dep. at 36-37; Pls.' Beckjord Exs. 29-30. According to CG&E's maintenance manager, any project longer than four weeks was considered a "long duration" job and a major modification. *See* Schipper Dep. at 33, 161-62, 197. The Unit 3 project took thirteen weeks to complete. *See* Moreland Dep. at 16, 151.

Apparently the Unit 3 project was a success. In its 1986 Annual Report, CG&E reported that "complete renovation" had returned the unit to service "with significantly improved operating efficiency." *See* Pls.' Beckjord Ex. 36. Indeed, CG&E anticipated that potential outages in the future would be less than the potential outages had it not undertaken the project. *See* Moreland Dep. at 51-53. Moreover, CG&E touted the project as "the first complete renovation of an electric

generating unit in the U.S.,” and it noted that its project was “being used as a model for study by utilities in this country and from as far away as Australia.” *See* Pls.’ Beckjord Ex. 36.

Shortly after the Unit 3 project, CG&E began work on Unit 2. Unit 2 was placed into service in 1953 and was over thirty-three years old at the time its life extension project began. *See* Pls.’ Beckjord Ex. 38. CG&E expected the project to take sixteen weeks. *See* Moreland Dep. at 23. The goal for the Unit 2 project was “to return the unit to its original capacity rating and efficiency, increasing its availability to the system.” *See* Pls.’ Beckjord Ex. 36. In addition, the project was designed to obtain an additional thirty years of service from the unit. *See* Pls.’ Beckjord Ex. 39.

Similar to the project at Unit 3, the project at Unit 2 involved the use of numerous contractors as well as CG&E employees. Pls.’ Beckjord Exs. 39, 41, 45-49. The project required “a tremendous coordination and planning effort.” *See* Pls.’ Beckjord Ex. 41. The project at Unit 2 resulted in “modifications or replacements” of fifty-seven distinct components. *See* Pls.’ Beckjord Ex. 11. Some of the changes involved redesigned or upgraded parts. *See* Moreland Dep. at 103-16, 125-28, 147-51; Schipper Dep. at 117, 120, 145. Almost all components that were replaced were original equipment that had never been replaced and have not been replaced since the project. *See id.* In an employee newsletter, CG&E called the work “extensive remodeling” that would result in “extensive improvements.” *See* Pls.’ Beckjord Ex. 8. In fact, in order to replace boiler tubing at Unit 2, CG&E used a barge-mounted crane to remove approximately 500 tons of old tubing, load the old tubing onto another barge for transport to a scrap dealer, and then unload the new tubes from a third barge and lifting them into the plant for installation. *See* Pls.’ Beckjord Ex. 50.

The Unit 2 project was originally budgeted for \$18,000,000.00 and ultimately cost \$19,100,000.00. *See* Moreland Dep. at 124-25; Pls.’ Beckjord Ex. 54. Like the Unit 3 project, the

Unit 2 project was funded from a capital construction account rather than the maintenance budget and required the company president's pre-approval due to its size, cost, and complexity. *See Pls.' Beckjord Exs. 51-53.*

CG&E declared the project at Unit 2 a success, specifically indicating that the original capacity rating and efficiency had been restored and that an estimated twenty years had been added to the life of the unit. *See Pls.' Beckjord Ex. 5.* In fact, just as it did with the project at Unit 3, CG&E anticipated that potential outages in the future would be less than the potential outages had it not undertaken the project at Unit 2. *See Moreland Dep. at 51-53.*

Finally, shortly after completing the life extension project at Unit 2, CG&E began work on Unit 1. Unit 1 began operations in 1952. *See Pls.' Beckjord Ex. 56.* In its 1987 Annual Report, CG&E characterized the intended project at Unit 1 as a "complete life extension" and identified the goal of the project as restoring the unit to its "original capacity rating and efficiency, adding an estimated [twenty] years to the life of [the] unit." *See Pls.' Beckjord Ex. 5, 60.* Prior to undertaking the life extension project at Unit 1, CG&E engineers had noted longstanding problems with Unit 1's availability and reliability that were caused by its deteriorating condition. *See Schipper Dep. at 87, 89, 100.* Thus, the project entailed "extensive modifications" in order to convert the unit to "cyclic operation and to provide for high availability and reliability during its extended life" beyond the expected normal retirement date and to provide the unit with "levels of reliability, availability and efficiency consistent with a new unit." *See Schipper Dep. at 89; Pls.' Beckjord Exs. 58-59, 62.* The project was originally estimated to cost \$15,300,000.00 and, due to the project's cost, size and complexity, had to be pre-approved by the company president. *See Pls.' Beckjord Ex. 65.*

CG&E cannot identify any project after the life extension project at Unit 1 that approached the undertaking in terms of cost or scope. *See Moreland Dep. at 127-28.* Just as it did with the

projects at Units 2 and 3, CG&E hired several contractors to assist with the project at Unit 1. *See* Moreland Dep. at 33-35. As revealed by CG&E documents, “[e]xtensive pre-outage preparations were made” prior to the start of the project in order to “enable the contractors to complete the large work scope.” *See* Pls.’ Beckjord Ex. 58. One of these preparations was the installation of a tower crane to move materials around the site. *See* Pls.’ Beckjord Exs. 58, 60. The crane was so massive that it required the construction of its own concrete foundation, thirty-five feet square and seven feet thick. *See* Pls.’ Beckjord Ex. 60.

Once the pre-outage preparations were completed, the project itself took fifteen weeks to complete and resulted in “modifications or replacements” of fifty-nine components. *See* Pls.’ Beckjord Ex. 58-59, 61. Many of the components were replaced in their entirety, and virtually all of those were original equipment that had never been replaced and have not been replaced since the project. *See* Moreland Dep. at 126-27; Pls.’ Beckjord Ex. 62. Included within this work were retubing the condenser with forty miles of tubing and a “unique repair” on the low pressure turbine’s inner shell, which involved “replacing all [twelve] struts with new materials, then sending the entire [forty]-ton shell to a heat-treating plant to be ‘stress relieved’ in a [twelve]-foot-square oven at 1100° F for six hours.” *See* Pls.’ Beckjord Ex. 60. The project ultimately cost nearly \$20,000,000.00 and was funded from the capital budget account rather than the maintenance budget. *See* Moreland Dep. at 92-93; Pls.’ Beckjord Ex. 65.

Following the Unit 1 project, CG&E boasted that it had “gained recognition as an industry leader in the new technology of life extension.” *See* Pls.’ Beckjord Ex. 60. CG&E characterized the work at Unit 1 as “a repair that’s as good as new.” *See id.* Finally, in its 1987 Annual Report, CG&E declared that the project was a success and indicated that its life extension program “restores

the units to their original capacity rating and efficiency, adding an estimated [twenty] years to the life of each unit.” *See* Pls.’ Beckjord Ex. 5.

C. CAYUGA PLANT (UNIT 1)⁶

Cayuga Plant is located near the town of Cayuga in Vermillion County, Indiana, and consists of two equally-sized and similarly-designed units. *See* Batdorf Dep. at 30-31. From 1992 through 1997, Cinergy reported the following annual boiler maintenance expenses for the entire plant:

<u>Year</u>	<u>Reported Amount</u>
1992	\$ 495,406.00
1993	\$ 543,656.00
1994	\$ 1,137,404.00
1995	\$ 4,053,039.00
1996	\$ 6,819,503.00
1997	\$ 2,284,474.00

See Pls.’ Cayuga Exs. 2-7.

Cayuga Unit 1, the unit at issue in this Order, began operating in October 1970. *See* Batdorf Dep. at 30-31. Cinergy performed two projects at Unit 1 in the 1990s for which Plaintiffs seek partial summary judgment: replacement of reheater front pendants and replacement of lower slope tubes.

⁶ Plaintiffs have withdrawn their request for partial summary judgment on the project involving the replacement of reheater front pendants at Cayuga Plant’s Unit 2. *See* Pls.’ Consolidated Reply at 2, n.2.

The first major project that Cinergy undertook at Unit 1 was the replacement of the boiler reheater front pendants. Unit 1's front pendant is one of three sections of the reheater that consists of sixty-five groups of tubes known as "pendants" located at the center of the upper boiler. *See* Batdorf Dep. at 30-31; Simonds Dep. at 113; Pls.' Cayuga Ex. 16. Each pendant is approximately forty-seven feet high, 7.75 feet wide, and 2.5 inches thick and comprise part of the pathway for steam coming back from the boiler to the turbine. *See id.* Prior to the replacement project, the original tubing materials were a mix of T-11 steel, T-22 steel, and TP-304H stainless steel. *See* Pls.' Cayuga Ex. 17.

At some point, Cinergy began experiencing leaks in the tubes of Unit 1's reheater front pendants caused by "corrosion cracking" and overheating. *See* Simonds Dep. at 162-65. Each tube leak required Unit 1 to be shut down. *See id.* at 162. Cinergy concluded that the deterioration of the pendants had begun to jeopardize the availability of the Unit and that the rate of failures would increase if the pendants were not replaced. *See* Pls.' Cayuga Ex. 20. Specifically, Cinergy noted that leaks had resulted in a loss of 54,266 megawatt hours in the three-year period ending March 31, 1992, and a loss of 79,784 megawatt hours in the three-year period ending March 31, 1993. *See* Batdorf Dep. at 233; Pls.' Cayuga Exs. 18-20. These losses were part of the justification for the replacement project. *See id.* Cinergy considered alternatives to replacement, like tube shielding, but it ultimately decided to do a complete tube replacement. *See* Pls.'s Cayuga Ex. 19. In planning the reheater front pendant replacement project, Cinergy anticipated that replacement would lead to fewer leaks and forced outages resulting from those leaks. *See* Simonds Dep. at 186-87; Batdorf Dep. at 214.

The authorization for the project was prepared on April 21, 1994. *See* Simonds Dep. at 160; Pls.' Cayuga Ex. 20. Cinergy completed the replacement project during a planned outage that

concluded in June 1995. *See* Batdorf Dep. at 221. The project entailed replacement of all sixty-five of the reheater front pendants, which required Cinergy to make a special purchase for the project because it did not keep that many tubes on site. *See* Simonds Dep. at 141, 173. Cinergy purchased tubes that were custom bent and hired an outside contractor to do the installation work because it did not have sufficient in-house labor to complete the project in the necessary time frame. *See id.* at 141, 172-73. The project also involved a material change in one length of one of the pendant legs from SA213T22 to TP347H, a stainless material, that resulted in a different weld placement and a slightly longer leg to avoid exposure to elements and temperature. *See* Batdorf Dep. at 229-30; Simonds Dep. at 185-86.

The final cost for the replacement of the front reheater pendants was \$1,490,732.93. *See* Pls.' Cayuga Ex. 22. The cost was treated as a capital expenditure rather than a maintenance cost. *See id.* The replacement project was the only time in Unit 1's history that all of the tubes for the front reheater pendants were replaced in a single outage. *See* Simonds Dep. at 183.

The second major project Cinergy undertook at Unit 1 was the replacement of the lower slope tubes located in the furnace area of the boiler. These tubes help to circulate water through the boiler as the water is heated and turned to steam. *See* Batdorf Dep. at 31. The furnace area on Unit 1's boiler is approximately forty-six feet deep and fifty-two feet wide, and the front and rear furnace walls each have 263 tubes (for a total of 526 tubes overall). *See* Simonds Dep. at 15; Pls.' Cayuga Ex. 9. Sloping portions of these walls come together to form a hopper at the bottom of the furnace for coal ash to collect. *See* Pls.' Cayuga Ex. 10. In the early 1990s, the tubes in these sloping areas were beginning to thin as a result of slag falls, ultimately leading to leaks in the tubes. *See* Simonds Dep. at 15; Batdorf Dep. at 77-78. These leaks jeopardized the availability of Unit 1 because they led to shut downs to perform repairs. *See* Simonds Dep. at 18-19; Batdorf Dep. at 77-78.

Cinergy began planning a replacement project to address the problem with the lower slope tubes as early as 1992. *See* Simonds Dep. at 49. In 1995, Cinergy prepared a Capital Expenditure Authorization in which it noted that the tubes had deteriorated to the point that availability was jeopardized. *See* Pls.' Cayuga Ex. 11. The report also recommended that the tubes be replaced "to avoid acceleration of failure rates" and that "pad welding and spray metalizing [were] only treating the symptom, delaying the inevitable." *See id.* Cinergy anticipated that replacement would reduce the amount of leaks and forced outages and would save \$310,000.00 per year in avoided repairs on the lower slope tubes. *See* Simonds Dep. at 61-63; Batdorf Dep. at 100-01; Pls.' Cayuga Ex. 12.

The estimated cost of the lower slope tube replacement project was \$2,145,000.00 and was approved by Cinergy's Senior Vice President. *See* Pls.' Cayuga Ex. 13. Part of the project include asbestos abatement work. *See* Batdorf Dep. at 44, 46-48, 55. Cinergy also retained an engineering firm to assist in engineering work for the project as well as contractors to assist with installation work. *See* Simonds Dep. at 98-99; Batdorf Dep. at 75; Pls.' Cayuga Ex. 15. In addition, Cinergy purchased some 526 tubes for the project from an outside vendor because the project required more tubes than Cinergy usually kept on site. *See* Simonds Dep. at 84-85, 88-89; Batdorf Dep. at 56. Overall, Cinergy replaced all but about five or six feet of the tubes in the front waterwall of the furnace and all of the 263 tubes in the rear wall during a 1996 planned outage. *See* Batdorf Dep. at 33, 37, 39-41, 64; Pls.' Cayuga Ex. 14.

After completion, the new lower slope tubes had an added feature that the prior tubes did not have. *See* Simonds Dep. at 108-09; Batdorf Dep. at 57. Specifically, the new tubes had wear bars added to the outside of the tube in order to help prevent further slag falls from causing tube leaks. *See id.* The tubes were essentially the same in all other respects and no structural change to the boiler was required in order to install the tubes. *See* Batdorf Dep. at 57, 66. The total project cost

included \$1,949,854.24 in replacement costs and \$146,510.75 in equipment retirement costs. *See* Batdorf Dep. at 139. Cinergy treated the replacement costs as a capital expense rather than as an annual maintenance cost. *See id.* at 139, 141. The lower slope tube replacement project was the only time that an extensive tube replacement was done in a single outage at Cayuga Unit 1. *See id.* at 144-45; Simonds Dep. at 105.

D. GALLAGHER STATION (UNITS 1 AND 2)⁷

Gallagher Station has four coal-fired units. *See* Pls.' Gallagher Ex. 1 at 14-1. The total annual boiler maintenance costs for all four of Gallagher's units between 1989 and 1999 ranged from as low as \$2,611,223.00 to as high as \$3,895,881.00. *See* Pls.' Gallagher Mem. in Supp. of Mot. for Partial Summ. J. ("Pls.' Gallagher Mem."), Attach. A. The total annual electric plant maintenance costs for all four units between 1987 and 1990 ranged from \$926,399.00 to \$2,088,954.00. *See id.* In 1985, Cinergy developed a life extension or refurbishment plan for the PSI Energy plants, including Gallagher. *See* Pls.' Gallagher Ex. 3; Pls.' Gallagher Ex. 4 at 2. The ultimate goal of the plan was to extend the life of existing plants in order to defer the need to build new units. *See* Pls.' Gallagher Ex. 4 at 2-3. The two units for which Plaintiffs are seeking summary judgment, Units 1 and 2, began operations in 1959 and 1958, respectively. *See* Pls.' Gallagher Ex. 1 at 14-1. Both units have the same boiler design and are essentially identical. *See* Batdorf Dep. at 26. The expected retirement dates for the two units was 1995, but Cinergy expected

⁷ Plaintiffs have withdrawn their request for partial summary judgment on the project involving the replacement of the radiant superheaters at Gallagher Station's Unit 2. *See* Pls.' Consolidated Reply at 2, n.2.

that refurbishment would extend the life of Units 1 and 2 to 2014 and 2013, respectively. *See* Pls.' Gallagher Ex. 5.

The first project Cinergy undertook at Gallagher Station was retubing the condenser at Unit 2. The condenser at Unit 2 consists of 85,000 square feet of heating surface with 10,920 tubes that are each thirty feet long. *See* Pls.' Gallagher Ex. 54. The condenser is approximately two stories high and sixty feet wide. *See* Renner Dep. at 220.

Prior to beginning the condenser retubing project, Cinergy conducted an extensive life extension study of the condenser. *See id.* at 188; Orender Dep. at 75-76; Batdorf Dep. at 71-72. All of the condenser tubes had originally been made of brass, but during 1971 and 1972 portions of the tubes in the air removal section of the condenser had been replaced with tubes made of 70/30 copper-nickel while others in the upper bundle of the condenser had been replaced with new brass. *See* Pls.' Gallagher Ex. 54. Part of Cinergy's routine repair and maintenance on the tubes was to insert alkaserts into the tubes that were leaking. *See* Batdorf Dep. at 86, 115. Based on its assessment, Cinergy concluded that Unit 2's main condenser would not be able to remain in service for its expected life without complete retubing, which was recommended to be done by 1990. *See id.* at 74; Pls' Gallagher Ex. 54. Accordingly, retubing of the condenser at Unit 2 was scheduled for 1989. *See* Pls.' Gallagher Ex. 57.

After the project was scheduled, Cinergy staff met in August 1988 to discuss the selection of materials for the new condenser tubes. *See* Pls.' Gallagher Ex. 58. The staff noted that Cinergy could save roughly \$250,000.00 in expenses by using titanium tubes purchased for a cancelled nuclear plant at Marble Hill rather than purchase new brass tubes. *See* Pls.' Gallagher Exs. 59-60. Cinergy then hired an outside firm to perform a galvanic corrosion study on the areas of the condenser tube sheet that would come into contact with either titanium or stainless steel tubes, the

two tube material alternatives that Cinergy was considering for the retubing project. *See* Batdorf Dep. at 36; Renner Dep. at 253-54. Cinergy also hired a separate firm to advise Cinergy on tube supports to correct a design flaw. *See* Batdorf Dep. at 37-38; Renner Dep. at 255-56. Specifically, the original supports for the condenser had been too far apart, permitting excessive tube vibration that led to fatigue and ultimately tube failure. *See id.* That firm recommended additional tube supports for new tubing called “tweeners,” a recommendation that Cinergy opted to adopt. *See* Batdorf Dep. at 22-23, 37-38; Renner Dep. at 255-56; Pls.’ Gallagher Ex. 60. Finally, Cinergy hired a third outside firm to investigate engineering issues associated with the planned retubing such as condenser uplift and tube support. *See* Batdorf Dep. at 33-34.

As justification for the project, Cinergy noted that the condenser had been in service for almost thirty years and that, along with the condenser at Unit 1, had cost the company 43,126 megawatt hours due to condenser leaks. *See* Pls.’ Gallagher Ex. 61. Moreover, continued plugging of the leaks did not appear to be effective because the pattern of leaks was “growing exponentially.” *See id.* Indeed, Cinergy estimated that it had already plugged 4.5% of the 10,920 tubes in the condenser. *See id.* Cinergy feared that if the problem was not addressed, Gallagher Station would no longer be reliable by the mid-1990s and the Unit’s heat rate would be significantly effected, thereby driving up the cost of manufacturing power at Gallagher Station. *See id.*; Pls.’ Gallagher Ex. 60. The Station Manager and the Executive Director of Fossil Power Operations ultimately authorized retubing the Unit 2 condenser with titanium tubes on December 18, 1989. *See* Snapp Dep. at 160-61; Pls.’ Gallagher Ex. 62.

The condenser retubing was done during a planned outage that occurred from August 8, 1990, through November 21, 1990. *See* Batdorf Dep. at 30. The project entailed retubing the condenser in its entirety, and this was the first time that all of the tubes in the condenser at Unit 2

had been replaced. *See id.* at 18, 117; Pls.’ Gallagher Ex. 54. The total capital construction cost for the project was \$855,935.64, and there were additional expenditures associated with removal costs. *See Batdorf Dep.* at 126-27; Pls.’ Gallagher Ex. 63. Cinergy hired an outside contractor to provide the labor to remove the titanium tubes from the Marble Hill condenser, remove the old tubes from Unit 2’s condenser, install the titanium tubes, and install the new “tweener” support system. *See Batdorf Dep.* at 24. The installation of the “tweeners” was somewhat unique because the manufacturer of the “tweeners” had to come up with a design concept in order to scale down the large segments so that the pieces could go through the condenser’s opening and then be stacked for assembly, a process that the manufacturer had never confronted. *See Renner Dep.* at 256-57. The project apparently was a success because the two employees responsible for it presented a paper on how to retrofit supports and retube condensers to other employees at an engineering conference. *See Pls.’ Gallagher Ex.* 60.

The second project for which Plaintiffs seek summary judgment is the replacement of the pulverizer system at Unit 1. The major components of the original system included three ball tube pulverizers or “ball mills,” three crusher dryers, three coal feeders, six exhausters, three classifiers, and associated electrical and control equipment and systems. *See Pls.’ Gallagher Exs.* 6-7. The mills were designed to grind twenty-four tons of coal per hour and the pulverizer motors generated 400 horsepower. *See id.*

Unfortunately, the pulverizer systems had a history of performance and maintenance problems, including high maintenance on ball mill gear trains and bearings, reduced output and deratings due to wet coal, excessive wear on crusher hammers, poor control of coal feed rates, and

loss of ignition.⁸ *See* Pls.’ Gallagher Exs. 8-10. Studies done at Units 3 and 4 recommended the replacement of the pulverizers and indicated that these systems required “the most attention to reach the objectives of the Life Extension Program.” *See* Pls.’ Gallagher Exs. 3, 9, 12, 14. One of the changes recommended by those studies was using vertical bowl mills. *See* Pls.’ Gallagher Ex. 12. Cinergy used the information it obtained from the studies at Units 3 and 4 for all of its units at Gallagher Station and it included a project to replace the ball mill systems in its construction budgets for the years 1989 to 1992. *See* Batdorf Dep. at 75-76; Pls.’ Gallagher Ex. 3.

The pulverizer replacement projects were ultimately delayed and Cinergy undertook piecemeal fixes to the mills, such as installation of new crushers, classifiers, and gear trains. *See* Pls.’ Gallagher Exs. 3, 16-17. In 1990, Cinergy spent approximately \$672,000.00 to modify the fuel feed system in order to obtain performance improvements. *See* Pls.’ Gallagher Ex. 18. In 1994, Cinergy staff noted that a new pulverizer for Unit 1 had been pushed back to 1996. *See* Pls.’ Gallagher Ex. 13. During this time, the units continued to experience derates and poor performance due to the pulverizers. For example, Unit 1 in particular experienced more than 20,000 megawatt hours of lost generation in 1995 attributable to pulverizer problems such as wet coal and opacity. *See* Batdorf Dep. at 88; Pls.’ Gallagher Ex. 19.

Delays in replacing the pulverizers appear to have continued because in May 1997 Cinergy staff noted that the pulverizer systems were “the primary influence detracting from optimum station

⁸ A company takes a “derate” when it operates a plant at less than full capacity so that it burns less coal and can stay within opacity limits. *See* Batdorf Dep. at 32-33; Pls.’ Gallagher Exs. 10, 13. “Loss of ignition” means that fuel in the coal is not used, or more simply, that there is a failure to completely burn the coal. *See* Batdorf Dep. at 32. Failure to completely burn coal can affect a plant’s ability to stay within the limits on the opacity of its emissions because incompletely burned coal has a different “resistivity” than ash, which can affect the collection of coal particles. *See id.* at 32-33.

performance” and were impacting profits. *See* Pls.’ Gallagher Ex. 7. Cinergy expected that replacing the pulverizers would reduce the number of forced outages and unavailability, improve the ability of its units to burn coal (*i.e.*, decrease loss of ignition problems), result in cost savings from improved fuel flexibility, and reduce operation and maintenance costs. *See* Pls.’ Gallagher Exs. 7, 21-22. By August 22, 1997, Cinergy determined that the pulverizer replacement project was justified by using refurbished rather than new mills and approved the project. *See* Cross Dep. at 306; Pls.’ Gallagher Ex. 9. Subsequently, in October 1997, the Station Manager and General Manager of Construction and Special Projects authorized the removal of existing mills and auxiliary equipment and the installation of refurbished pulverizers and auxiliary equipment. *See* Snapp Dep. at 155-56; Puskamp Dep. at 19; Pls.’ Gallagher Ex. 24. The project was so large that Cinergy formed a special team for the Unit 1 installation. *See* Pls.’ Gallagher Ex. 28.

Work on the new Unit 1 pulverizer system began before the scheduled outage needed for installation of the system and included numerous tasks such as purchasing and refurbishing the pulverizers, feeders, motors, exhausters, distributors, dampers, controls, valves, feed pipe, and couplings; dismantling the purchased pulverizers in Canada and transporting them to Gallagher Station; planning for the demolition of the existing pulverizer system; and completing various engineering tasks, including structural engineering for building steel and equipment foundations. *See* Pls.’ Gallagher Ex. 29. Cinergy hired a contractor to dismantle the pulverizers and transport them to Gallagher Station. *See* Pls.’ Gallagher Ex. 20. The base assembly alone for each of the three mills weighed 52,000 pounds. *See* Pls.’ Gallagher Ex. 31. Cinergy employees then refurbished the purchased pulverizers as a training exercise for future maintenance on the pulverizers once they were finally installed. *See* Curry Dep. at 84; Carchedi Dep. at 65. Prior to the actual installation, Cinergy hired an architectural and engineering firm to design a foundation for

the new pulverizer equipment and new coal piping from the pulverizers to the burners and new primary air ducts. *See* Pls.' Gallagher Ex. 32. Cinergy also purchased three new gravimetric coal feeders that would allow it to increase coal feed rates up to twenty-nine tons per hour and purchased new 700 horsepower motors for the Unit 1 pulverizers. *See* Batdorf Dep. at 66; Pls.' Gallagher Exs. 33-34.

The new pulverizer system at Unit 1 was installed during a planned outage that lasted from April 23, 1998, until July 4, 1998. *See* Pls.' Gallagher Ex. 38. Cinergy hired a contractor to remove and demolish the existing fuel feed system and erect the new system. *See* Curry Dep. at 84; Pls.' Gallagher Ex. 35. Installation of the new system required the removal and relocation of a number of items such as building ventilation ducts, an ash handling service water pump, fire protection piping, compressed air piping, structural steel, acid cleaning piping, local steam heating piping, ignitor control panels, and an air compressor aftercooler. *See* Pls.' Gallagher Ex. 36. Cinergy also hired a firm, Storm Technologies, to assist in making sure that the new pulverizers were set up properly and performed at the expected level. *See* Curry Dep. at 213-14; Batdorf Dep. at 33. Storm Technologies was also hired to assist in the initial startup, diagnostics, and testing of the new fuel feed system. *See* Curry Dep. at 82; Pls.' Gallagher Exs. 39-40. Based on its review, Storm Technologies recommended that Cinergy modify the burners to accommodate the newly designed fuel feed system by, among other things, enlarging burner nozzles and modifying venturi openings, changes that Cinergy ultimately undertook. *See* Curry Dep. at 82; Pls.' Gallagher Ex. 39.

Even after Unit 1 was back on line, the pulverizer project was still not complete. Cinergy still had to construct journal monorails, install ceramic exhaust blades, temper air damper shrouds, and work on the motor sole plates. *See* Curry Dep. at 162-78; Pls.' Gallagher Ex 41. Many of these items were scheduled for a November 1998 outage. *See id.* The construction costs for the

replacement of the pulverizer system at Unit 1 was \$4,511,831.00, which was treated as a capital cost. *See* Batdorf Dep. at 210; Pls.' Gallagher Ex. 42. The project marked the first time in the Unit's history that Cinergy completely replaced the pulverizer system. *See* Batdorf Dep. at 74. In contrast to complete replacement, Cinergy's regular maintenance on the pulverizers had previously included such things as replacing hammers and guards in the crushers, replacing exhaust or fan blades, and replacing balls. *See* Cross Dep. at 249. As a result of the pulverizer replacement project, Unit 1 experienced a seven megawatt gain in capacity due to the elimination of the derates previously associated with the pulverizers. *See* Pls.' Gallagher Exs. 43-44.

E. GIBSON STATION (UNIT 2)⁹

Gibson Station consists of five or six coal-fired electricity generating units.¹⁰ Plaintiffs are seeking partial summary judgment for a project done at Unit 2.

Unit 2 began operation in 1975. *See* Pls.' Gibson Ex. 2. The reheater for Unit 2 contains a low temperature or inlet section and a high temperature or outlet section. *See* Pls.' Gibson Exs. 3, 43. The low temperature section of the reheater consists of two horizontal banks of tubes in the heat recovery area above the economizer. *See id.* The high temperature section is located in the

⁹ Plaintiffs have withdrawn their request for partial summary judgment on the project involving the replacement of the reheater section at Gibson Station's Unit 1. *See* Pls.' Consolidated Reply at 2, n.2.

¹⁰ Plaintiffs claim that there are five units at Gibson Station while Cinergy states that there are six units. Even though neither side has explicitly directed the Court to any exhibit in support of these statements, the Court need not determine whether there are actually five or six units because the difference is immaterial for deciding the present motions for partial summary judgment.

convection area of the boiler and consists of ninety-six pendant tubing elements suspended from the boiler roof and extending from one sidewall to the other. *See id.*

In 1993, a TP304H stainless steel tube was removed and examined. *See Pls.’ Gibson Ex. 44.* The examination revealed that the tubing was seriously embrittled. *See id.* In addition, a sample of T-22 alloy steel tubing was removed and analyzed. *See Pls.’ Gibson Ex. 45.* The analysis report concluded that the tubing had suffered a wall thickness loss of 38% from a combination of outside and inside attack, and it stated that more than one-half of the service life of the tube had been used if operating conditions remained the same. *See id.* Subsequently, in April 1995, Cinergy prepared an Engineering Service Request to replace the reheater’s horizontal and vertical convection passes and to include tube shields in the replacement design in order to prevent fly ash and fly ash erosion. *See Pls.’ Gibson Ex. 46.* The design was also to include upgraded, stainless steel convection pass legs to prevent coal ash corrosion. *See id.* The Request noted that the reheater would reach twenty-four years of service in 1999, that it was nearing the end of its useful life, that it was severely damaged from corrosion and erosion, and that replacement was required in order to prevent tube leaks and loss of availability. *See id.*

The reply to the Request was that an engineering study would need to be done in 1997. *See id.* Cinergy then contracted with an outside firm, Foster Wheeler Energy Corporation (“Foster Wheeler”), to study the reheater at Unit 2. *See Pls.’ Gibson Ex. 49.* In its report dated October 10, 1997, Foster Wheeler stated that the specific goals for the study were to evaluate the Unit’s operation and reheater metals under current operating conditions, to predict the Unit’s performance with the addition of a furnace nose, and to predict the Unit’s performance and evaluate the reheater metals with the addition of a furnace nose and the extension of the reheater “dogleg” to the fullest extent possible. *See id.* Foster Wheeler concluded that using TP304H stainless steel tubing was

satisfactory for the intended service and that gas temperatures could be lowered in the area of the reheater vertical tubes by adding a furnace nose to the Unit. *See id.*

Subsequently in 1998, Cinergy's Boiler Task Force for Gibson Station identified reheater tube leaks and the resulting forced outages as one of the largest contributors to the Station's forced outage rate. *See Pls.' Gibson Exs. 50-54.* Cinergy then prepared a Capital Expenditure Authorization for the project in which it stated that the justification for the Unit 2 reheater upper section replacement was that it would eliminate six tube leaks per year of four days' duration each and \$150,000.00 in maintenance costs associated with tube leak repairs. *See Pls.' Gibson Ex. 47.* Cinergy also indicated that the project scope would include the first row of tubes in the upper horizontal section, the vertical tubes, and the pendant tubes all the way to the outlet header, and it stated that the tube material would be upgraded from T-22 to TP304H stainless material in order "to mitigate coal ash corrosion." *See id.* After a work order for the project was approved, Cinergy placed an order for the materials required for replacement, including tubing that was fabricated by Foster Wheeler. *See Pls.' Gibson Exs. 54, 58-59.*

Cinergy contracted with outside contractors to perform the installation of the reheater upper section. *See Pls.' Gibson Exs. 60-71.* The replacement was expected to take place during a scheduled outage beginning on or about February 16, 2001, and continuing through May 14, 2001, during which time several other planned projects would take place at Unit 2. *See Pls.' Gibson Exs. 9, 72-76.* On February 14, 2001, prior to beginning work, Cinergy and contractor employees met to discuss the upcoming outage, the activities to be performed, and scheduling issues. *See Pls.' Gibson Exs. 72, 77.* In order to remove the original tube assemblies, an access opening in the elevated floor of the boiler and an opening on the west side of the building were created so that a monorail could be installed to assist with the removal of the old vertical pendant sections and

replacement of the new sections. *See* Barrett Dep. at 191-93; Pls.' Gibson Exs. 60, 71.

The contractor for the reheater upper section replacement project demobilized on or about May 17, 2001, and Unit 2 was returned to service thereafter. *See* Pls.' Gibson Ex. 70. Cinergy ultimately expended approximately \$3,367,182.00 on the project, the cost of which was capitalized. *See* Batdorf Dep. at 171; Pls.' Gibson Ex. 78. The project marked the first time that the reheater upper section at Unit 2 was replaced. *See* Pls.' Gibson Ex. 46.

F. MIAMI FORT STATION (UNITS 5 AND 7)¹¹

The Miami Fort Station is located in North Bend, Ohio, and consists of four coal-fired electricity generating units numbered 5 through 8. *See* Pls.' Miami Fort Ex. 1. Plaintiffs are seeking partial summary judgment for projects that occurred at Units 5 and 7.

The Unit 5 project involved replacement of the Unit's slope tubes and headers. Unit 5 entered service in 1949 and has two boilers, each capable of supplying enough steam to generate about forty megawatts of power. *See* Pls.' Miami Fort Ex. 2. An assessment in 1989 revealed that Unit 5's boilers were in fair to poor condition and were unable to provide reliable service for the next twenty years absent extensive replacement of tubing and headers. *See id.* Such replacement was necessary in order to achieve an additional twenty years of reliable operation. *See id.* At the time of the assessment, the existing boilers and slope tubes at Unit 5 were over forty years old. *See* Pls.' Miami Fort Ex. 2. The slope tubes had deteriorated to approximately 52% of their original wall

¹¹ The plaintiff-intervenors initially filed for partial summary judgment regarding Units 5, 7, and 8 at the Miami Fort Plant. However, in the consolidated reply brief, the plaintiff-intervenors withdrew their request with respect to Miami Fort Plant's Unit 8. Further, USA joined in the plaintiff-intervenors' motion for partial summary judgment with respect to Units 5 and 7. *See* Pls.' Consolidated Reply at 2, n.3.

thickness due to internal corrosion and deposition, which inevitably resulted in tube failures and numerous forced outages. *See* Pls.' Miami Fort Exs. 2, 4. In fact, the frequency of outages had increased. *See* Pls.' Miami Fort Ex. 2. In addition, the original lower waterwall headers, which had utilized a rolled tube construction designed for based loaded operations, had become overstressed and cracked in the rolled areas of the tubes after operation of the Unit in peak mode, and replacement of those tubes was required in order to prevent additional tube failures and ensure reliability of Unit 5. *See* Pls.' Miami Fort Ex. 4.

In May 1990, CG&E's General Engineering Department ("Engineering Department") received an Engineering Service Request seeking replacement of Unit 5's slope tubes and lower waterwall header, including casing and insulation. *See* Pls.' Miami Fort Exs. 3-4. The Engineering Department prepared a cost estimate and a capital funding request for the 1990 budget year to replace these items on both boilers. *See id.* CG&E deferred the request at that time. *See id.* Funding was requested again for the 1992 budget year. *See* Pls.' Miami Fort Ex. 4. However, the project to replace Unit 5's slope tubes and headers was not implemented until 1995. *See* Pls.' Miami Fort Exs. 5-6. By that time, tube leaks had increased to the point that the slope tubes and lower waterwall headers needed to be replaced in order to maintain the Unit's reliability. *See* Pls.' Miami Fort Ex. 8.

The replacement of the slope tubes and headers took eleven weeks to complete. *See* Pls.' Miami Fort Ex. 6. The work was done by outside contractors. *See* Moreland Dep. at 28-30. In addition to the replacement of these items, CG&E decided to change the configuration of the boilers by adding casing behind the new slope tubes to help reduce corrosion. *See* Moreland Dep. at 35-36.

The total cost of the project was \$1,890,948.05. *See* Moreland Dep. at 23-24.¹² The cost was capitalized rather than classified as a maintenance expense. *See* Pls.’ Miami Fort Ex. 4. This cost was only slightly less than the entire combined budget for boiler maintenance at Units 5 and 6 for 1994. *See* Pls.’ Miami Fort Ex. 10. CG&E’s total Federal Energy Regulatory Commission (“FERC”) budget for Miami Fort in 1994 was listed as \$2,047,016.00. *See id.*

In addition to the Unit 5 project, CG&E also replaced the upper waterwall tubing at Unit 7. Unit 7 began operation in 1975. *See* Pls.’ Miami Fort Ex. 1. The superheater of Unit 7 consists of a primary and a secondary section. *See* Pls.’ Miami Fort Ex. 11. The primary section is comprised of two horizontal banks of tubes in the backpass or heat recovery section of the Unit’s boiler. *See id.* Vertical risers from the top bank of primary tubes penetrate the furnace roof to the outlet header. *See id.* There are approximately 170 elements in each of the two primary superheater banks from sidewall to sidewall, and the original tubing was 2.25 inches in outside diameter made from SA209 T1a carbon steel. *See id.*

An outside vendor, Inspection Services, Inc., performed a waterwall tube wall thickness survey on Unit 7 and, in its inspection report dated April 20, 1988, noted that areas of the upper waterwalls tubing were thinning. *See* Pls.’ Miami Fort Ex. 12. In July 1989, an Engineering Service Request was initiated to replace 1000 square feet of upper waterwall tubing on each sidewall of the boiler. *See* Pls.’ Miami Fort Ex. 13. As a result of the request, a replacement project was budgeted for 1990. *See id.* The Construction and Retirement Budget Authorization for the project justified the replacement by noting that Unit 7 had incurred three upper waterwall tube failures in the past year due to damage to the internal surface of the tubes, each of which resulted in a forced outage.

¹² Cinergy indicates that the construction portion of the cost was \$1,316,736.34. *See* Cinergy’s Miami Fort Mem. in Opp’n at 12 (citing to Kissell Aff., ¶ 48).

See Pls.' Miami Fort Ex. 18. The authorization noted that unless the tubes were replaced, additional forced outages would occur at an average cost of \$70,000.00 per outage. *See id.* The company decided to replace the damaged areas in order to prevent future failures. *See* Pls.' Miami Fort Ex. 19. The project's estimated cost was \$538,000.00 plus \$50,000.00 for removal of old materials, and the project received an initial approved budget amount of \$665,000.00. *See* Pls.' Miami Fort Exs. 19-20. Cinergy indicates that the construction portion of the cost was \$393,755.84. *See* Cinergy's Miami Fort Mem. in Opp'n at 13 (citing Kissell Aff., ¶ 49).

On March 19, 1990, CG&E's General Engineering Department issued a specification indicating that new tube panels would have to be delivered by August 31, 1990, for the replacement project. *See* Pls.' Miami Fort Exs. 14-16. Once the new waterwall tubes arrived, they were 2.5 inches in outside diameter with a minimum wall thickness of 0.26 inches and made of SA210-A1 carbon steel. *See* Pls.' Miami Fort Ex. 16. The tubes were fabricated into flat panels ranging in width from six to seventeen tubes wide and ranging in height from twenty-two to thirty-six feet. *See id.* CG&E received a total of twelve tube panels along with twenty-four individual flat stud tubes. *See id.* The tubes were installed during an outage that began on September 21, 1990, and ended on October 15, 1990. *See* Pls.' Miami Fort Ex. 17. The replacement was done at the same time that other components were replaced, specifically a portion of the primary superheater. *See id.*

In addition to replacing the upper waterwall tubing at Unit 7, CG&E replaced the Unit's primary superheater. CG&E's efforts to replace the primary superheater date back to at least as early as 1989. In an Engineering Service Request dated July 5, 1989, CG&E noted that it spent \$50,000.00 to \$90,000.00 per year in order to repair or shield tubing in the primary superheater and that this figure was expected to increase yearly. *See* Moreland Dep. at 149-50; Pls.' Miami Fort Exs. 30-31. In addition, the request noted that tube leaks and subsequent forced outages would likely

increase if the primary superheater were not replaced in the next five years. *See id.* Consequently, CG&E decided that, due to its deteriorating condition, the entire primary superheater needed to be replaced within the next five years and it prepared a budget to cover such a complete replacement. *See Pls.’ Miami Fort Exs. 21-23, 29.* CG&E planned to purchase the elements for the primary superheater from an outside vendor and replace the components using a three-phase approach in which partial replacement would be performed during three consecutive outages. *See Pls.’ Miami Fort Ex. 24.* Phase one entailed replacement of the tubing in sixty elements along the sidewalls during a planned outage that ran from September 21, 1990, through October 15, 1990. *See Pls.’ Miami Fort Exs. 25-28.* Phases two and three entailed replacing 110 additional elements during outages in 1992 and 1993. *See Pls.’ Miami Fort Ex. 28.* The purpose of the overall project was to eliminate the cause of forced outages, *i.e.*, tube leaks occurring at high frequencies because of erosion, and thereby improve the Unit’s reliability and availability. *See Pls.’ Miami Fort Ex. 50.*

In September 1990, CG&E approved a work order request for the first phase of the primary superheater replacement project. *See Pls.’ Miami Fort Exs. 25-27.* In the budget authorization for this phase, CG&E stated that the primary superheater was nearing the end of its useful life and that extensive maintenance was required annually to repair and shield the tube elements. *See Pls.’ Miami Fort Ex. 28.* After placing an order for the elements, CG&E decided to add shields to the new tubes for erosion protection and to operate Unit 7 without the use of the two elements closest to each of the sidewalls so that those elements would act as additional sacrificial metal. *See Pls.’ Miami Fort Ex. 32.* CG&E hoped that the use of these shielding measures would delay the Unit’s first forced outage after it was replaced from two years to five, seven, or even more years. *See id.* The total estimated cost for phase one was \$1,480,000.00, although the construction portion was

\$345,104.00. *See* Pls.’ Miami Fort Ex. 27; Cinergy’s Miami Fort Mem. in Opp’n at 13 (citing to Kissell Aff., ¶ 50).

In June 1991, CG&E engineers performed an economic evaluation on the replacement project and concluded that the project would result in annual generation of 48,000 megawatt hours beginning in 1991. *See* Pls.’ Miami Fort Ex. 39. CG&E also approved the work order in 1991 for the second phase of the primary superheater replacement project. *See* Pls.’ Miami Fort Ex. 33. The scope of phase two was the replacement of sixty additional elements including selective tube shielding and insulation and lagging work during a planned outage from April 25, 1992, through May 19, 1992. *See* Pls.’ Miami Fort Exs. 34-35. CG&E hired an outside contractor to complete phase two of the project. *See* Pls.’ Miami Fort Exs. 35, 37-38. In addition to installing the new elements, the outside contractor installed twenty-four header plugs on the first two elements along each sidewall that had been installed during phase one in order to make them non-operational “dummy” elements and, ultimately, sacrificial metal to help control erosion. *See id.* The total estimated cost for phase two was \$1,631,000.00 for construction and \$150,000.00 for retirement of old components. *See* Pls.’ Miami Fort Ex. 40. Cinergy indicates that the final construction cost for phase two was \$1,250,598.55. *See* Cinergy’s Miami Fort Mem. in Opp’n at 13 (citing to Kissell Aff., ¶ 51).

In 1995, CG&E approved the work order for phase three of the primary superheater replacement project. *See* Pls.’ Miami Fort Exs. 41-42. The work order noted that this phase would complete the total replacement of the boiler’s primary superheater. *See id.* The final fifty elements were replaced during a planned outage from April 6, 1995, through May 11, 1995. *See* Pls.’ Miami Fort Ex. 43. In addition to replacing the tube elements, the erosion baffles were replaced and the individual tubes were shielded. *See* Pls.’ Miami Fort Exs. 44-45. The total estimated cost for phase

three was \$1,129,000.00 for construction and \$395,000.00 for the retirement and removal of old components. *See* Pls.’ Miami Fort Exs. 42, 46-48. Cinergy admits that the construction portion of the cost for phase three was \$1,121,556.92. *See* Cinergy’s Miami Fort Mem. in Opp’n at 13 (citing to Kissell Aff., ¶ 52).

III. SUMMARY JUDGMENT STANDARD

Motions for summary judgment are governed by Rule 56(c) of the Federal Rules of Civil Procedure, which provides in relevant part:

The judgment sought shall be rendered forthwith 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 a judgment as a matter of law.

Summary judgment is the “put up or shut up” moment in a lawsuit. *Johnson v. Cambridge Indus., Inc.*, 325 F.3d 892, 901 (7th Cir. 2003), *reh’g denied*. Once a party has made a properly-supported motion for summary judgment, the opposing party may not simply rest upon the pleadings but must instead submit evidentiary materials which “set forth specific facts showing that there is a genuine issue for trial.” Fed. R. Civ. P. 56(e). A genuine issue of material fact exists whenever “there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 (1986). The nonmoving party bears the burden of demonstrating that such a genuine issue of material fact exists. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986); *Oliver v. Oshkosh Truck Corp.*, 96 F.3d 992, 997 (7th Cir. 1996), *cert. denied*, 520 U.S. 1116 (1997). It is not the duty of the Court to scour the record in search of evidence to defeat a motion for summary judgment; rather, the nonmoving party bears the responsibility of identifying the evidence upon which he relies. *See*

Bombard v. Fort Wayne Newspapers, Inc., 92 F.3d 560, 562 (7th Cir. 1996). When the moving party has met the standard of Rule 56, summary judgment is mandatory. See *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986); *Shields Enters., Inc. v. First Chi. Corp.*, 975 F.2d 1290, 1294 (7th Cir. 1992).

In evaluating a motion for summary judgment, a court should draw all reasonable inferences from undisputed facts in favor of the nonmoving party and should view the disputed evidence in the light most favorable to the nonmoving party. See *Estate of Cole v. Fromm*, 94 F.3d 254, 257 (7th Cir. 1996), *cert. denied*, 519 U.S. 1109 (1997). The mere existence of a factual dispute, by itself, is not sufficient to bar summary judgment. Only factual disputes that might affect the outcome of the suit in light of the substantive law will preclude summary judgment. See *Anderson*, 477 U.S. at 248; *JPM Inc. v. John Deere Indus. Equip. Co.*, 94 F.3d 270, 273 (7th Cir. 1996). Irrelevant or unnecessary facts do not deter summary judgment, even when in dispute. See *Clifton v. Schafer*, 969 F.2d 278, 281 (7th Cir. 1992). “If the nonmoving party fails to establish the existence of an element essential to his case, one on which he would bear the burden of proof at trial, summary judgment must be granted to the moving party.” *Ortiz v. John O. Butler Co.*, 94 F.3d 1121, 1124 (7th Cir. 1996), *cert. denied*, 519 U.S. 1115 (1997).

IV. DISCUSSION

This Court previously indicated that the proper standard to apply to determine whether a project was “routine,” and therefore within the RMRR exclusion, is the standard this Court noted in *United States v. Southern Indiana Gas & Electric Co.*, 245 F. Supp. 2d 994, 1008 (S.D. Ind. 2003), and then later rearticulated and applied in *United States v. Southern Indiana Gas & Electric Co.*, Cause No. IP 99-1692-C-M/F, 2003 WL 446280, *2 (S.D. Ind. Feb. 18, 2003), and *United*

States v. Southern Indiana Gas & Electric Co., 258 F. Supp. 2d 884, 886 (S.D. Ind. 2003) (these orders collectively, “*SIGECO*”). See *United States v. Cinergy Corp.*, Cause No. 1:99-cv-1693-LJM-VSS, 2006 WL 372726, *2 (S.D. Ind. Feb. 16, 2006) (Docket No. 878) (citing to these orders from *SIGECO*). The RMRR analysis is a common sense approach that involves a fact intensive inquiry, on a case-by-case basis, of several factors such as a projects’s nature and extent, its purpose, the frequency of the repair or replacement, and the project’s cost. See *id.* at *2-3. 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. See *id.* at *3. Further, no single factor is dispositive. See *id.* Finally, while Plaintiffs must demonstrate that they are entitled to summary judgment, it ultimately would be Cinergy’s burden at trial to show that its activities are exempt from CAA compliance. See *id.* at *4.

In addition, as stated by the EPA in *SIGECO*, the interpretation of the RMRR exclusion has three hallmarks that bear repeating here:

First, the exemption applies to a narrow range of activities, in keeping with [the] EPA’s limited authority to exempt activities from the [CAA]. Second, the exemption applies only to activities that are routine for a generating unit. The exemption does not turn on whether the activity is prevalent within the industry as a whole. Third, no activity is categorically exempt. [The] EPA examines each activity on a case-by-case basis, looking at the nature and extent, purpose, frequency, and cost of activity.

SIGECO, 245 F.3d at 1008 (citing Pl’s Opp’n to Def.’s Mot. for Summary Judgment on Fair Notice at 1) (emphasis removed). See also *Cinergy*, 2006 WL 372726, *2 (quoting the same).

Finally, by separate order, the Court concluded that Cinergy had fair notice of these standards for determining whether Cinergy’s projects qualify for the RMRR exclusion. See Order on Cross-Mots. for Summ. J. Re: Fair Notice Def. Therefore, any arguments Cinergy has made in opposition to the instant motions for summary judgment regarding the proper standard for fair notice

and any estoppel-type arguments will be disregarded in this Order for the reasons that this Court has already explained in its prior Orders.

Having once again articulated the proper standard for the RMRR analysis, the Court will apply that standard to each of the five plants at issue in the instant motions for partial summary judgment.

A. CINERGY'S GENERAL ARGUMENTS APPLICABLE TO ALL PLANTS

In each of its responses in opposition to the motions for partial summary judgment, Cinergy makes several general arguments applicable to all of its plants. The Court addresses the more poignant of these arguments in turn.

First, Cinergy contends that partial summary judgment is inappropriate because the RMRR analysis is fact-sensitive. Cinergy argues that the analysis requires a delicate balancing that must be decided by a jury. The Court disagrees. As already noted, Cinergy has not disputed Plaintiffs' facts. Therefore, there are no genuine issues of material fact, and the only question is whether Plaintiffs are entitled to summary judgment based on those facts. Moreover, the ultimate question of whether the changes were "routine" within the meaning of the RMRR exemption is a question of law for the Court requiring application of statutes and case law. *See, e.g., Nat'l Parks Conservation Ass'n, Inc. v. TVA*, 413 F. Supp. 2d 1282, 1287 (N.D. Ala. 2006); *United States v. Ohio Edison Co.*, Cause No. 2:99-cv-1181, 2003 U.S. Dist. LEXIS 25464, *29 (S.D. Ohio Jan. 22, 2003).¹³ This is true despite the fact that the parties' designated "experts" have--not surprisingly--

¹³ The Court recognizes that the *Ohio Edison* court denied partial summary judgment on the issue of whether the projects in that case were "routine" under the RMRR exclusion because of several factual disputes and that the court did not actually apply the RMRR factors until after it had received evidence at a bench trial. *See United States v. Ohio Edison Co.*, 276 F. Supp. 2d

reached different conclusions on this question of law. While one could find those opinions interesting, or even informative, the ultimate conclusions on whether Cinergy's projects were "routine" are inadmissible and will not be considered by the Court. See *West v. Waymire*, 114 F.3d 646, 652 (7th Cir. 1997); *In re Ocean Bank*, 481 F. Supp. 2d 892, 898 (N.D. Ill. 2007) (citing *Good Shepherd Manor Found. v. City of Momence*, 323 F.3d 557, 564 (7th Cir. 2003) ("Expert testimony as to legal conclusions that will determine the outcome of a case is inadmissible.")). Therefore, the Court rejects Cinergy's suggestion that a jury must decide whether its projects were "routine."

In addition, the Court is not persuaded by Cinergy's attempt to obfuscate the multi-factor analysis for the RMRR exclusion. For example, Cinergy contends that the Court should separately consider such things as whether a project involved the replacement of major components, whether a project was "massive" and "unprecedented," and whether a project would significantly or fundamentally change a unit. In essence, Cinergy's recitation of "additional" or "other" factors is really just a set of variations on the factors identified by the Court in *SIGECO*. Indeed, the examples just noted are really just different permutations of questions related to the "nature and extent" factor. Because they are stated more concisely, the Court prefers to employ the factors as previously articulated rather than how Cinergy would like to phrase them.

Likewise, the Court is unwilling to accept Cinergy's suggestion that the circumstances in *Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990) ("*WEPCO*"), *reh 'g and reh 'g en banc denied*, should be some sort of bar by which to measure other projects. This Court has specifically rejected the argument that *WEPCO* should be used as a measuring stick in other cases.

829 (S.D. Ohio 2003). Unlike that case, however, none of the material facts for Cinergy's projects under scrutiny in this Order are disputed. Therefore, the case is well-positioned, like the *Ohio Edison* court after the bench trial, to determine whether those projects were routine

See *SIGECO*, 245 F. Supp. 2d at 1017. The Court will adhere to that conclusion in this case.

Equally troubling, and just as easily disposed, is Cinergy's attempt to deflect the Court from consideration of the fact that Cinergy used outside contractors and vendors on the projects under scrutiny in this Order. While Cinergy may not consider these facts significant or determinative, it does not mean that they are unimportant to the analysis of the projects. Indeed, the use of outside contractors is a fact that courts have examined in evaluating whether a project is routine maintenance, repair, or replacement. See, e.g., *Ohio Edison Co.*, 276 F. Supp. 2d at 834. Therefore, the Court will consider such facts in its analysis of the projects.

Finally, the Court is unpersuaded by Cinergy's treatment of the cost factor. Cinergy goes to some lengths to downplay the cost of the projects. It suggests that how it characterized its costs, *i.e.*, as capitalized, was no more than required accounting treatment that has nothing to do with whether the projects were routine. In addition, it suggests that the costs for individual projects were really insignificant when compared to the total maintenance costs for all of its facilities combined and were less than building new facilities.

The Court must disagree that a consideration of whether costs were capitalized is unimportant. How expenses are treated is important to determine whether a project was routine. As the Southern District of Ohio has observed when comparing routine maintenance and capital improvements, the latter "generally involve more expense, are large in scope, often involve outside contractors, involve an increase of value to the unit, are usually not undertaken with regular frequency, and are treated for accounting purposes as capital expenditures on the balance sheet." *Ohio Edison Co.*, 276 F. Supp. 2d at 834. Further, the *Ohio Edison* court found it significant that the projects at issue there had been capitalized for accounting purposes. See *id.* at 859. Cinergy has not presented the Court with any persuasive argument to contradict the *Ohio Edison* court's finding

that the manner in which a company categorizes its costs is important.

Similarly, the Court is not persuaded by Cinergy's attempts to minimize the costs of the projects by presenting them as fractions or percentages of its total maintenance costs for all facilities combined. It seems axiomatic that the costs to make repairs or replacements at one facility will be less than the maintenance costs for all facilities combined. Cinergy may as well have compared the costs of the individual projects to the national debt. The point is that Cinergy's projects were costly when compared to the maintenance costs for the facilities where they occurred, and the costs were enough to require high-level management approval. Therefore, the costs have a bearing on whether the projects were routine.

Likewise, the fact that a repair or replacement project cost less than building a new facility is not surprising; if it were more expensive, Cinergy would have opted to build new facilities. Indeed, common sense suggests that cost savings is one of the reasons for doing a life extension or replacement project in the first place. The same was true in the *WEPCO* case as demonstrated by the Clay Memorandum, which noted that renovation of that facility would cost \$7.8 million while building a new facility would cost \$51.6 million. *See* Cinergy's Beckjord Exhibit 8 at 6. Nevertheless, the Seventh Circuit concluded that the EPA had properly considered the relevant RMRR factors, which included a consideration of the costs. *See WEPCO*, 893 F.2d at 910-13. Accordingly, this Court finds that the costs of the projects under scrutiny are relevant and will consider them.

The Court now turns to the projects at issue in this Order and the application of the standard for the RMRR analysis.

B. BECKJORD STATION (UNITS 1, 2, AND 3)

1. Nature and Extent

CG&E completed three different project at Beckjord Station.

The first project CG&E undertook was the Beckjord Unit 3 project. The Court decides that the nature and extent of this project support a conclusion that the project was not routine. Like the projects in *WEPCO* and *SIGECO*, the Unit 3 project was a complete renovation project intended to extend the Unit's life. *See* Pls.' Beckjord Exs. 5, 7, 16. The planning of the project was significant because the Unit 3 project only took place after several outside contractors had performed detailed inspections and assessments and after several multi-volume planning studies had been prepared. *See* Moreland Dep. at 160, 185; Pls.' Beckjord Exs. 13, 16.

In addition, the scope of the Unit 3 project was massive. Specifically, the project ultimately resulted in modifications or replacements to approximately forty-nine components and affected nearly every piece of equipment. *See* Moreland Dep. at 80-81, 88-91; Schipper Dep. at 61-62, 120, 183-84; Pls.' Beckjord Exs. 11, 17-19. CG&E itself used such terms as "extensive remodeling," "extensive improvements," and "complete overhaul" to describe the project. *See* Pls.' Beckjord Exs. 5, 7-9, 24-25. Some of the notable features of the project included removal of the boiler's superheater and two reheater outlet headers some 120 feet above the main floor, the smallest of which weighed 6 tons, and the replacement of some 10,000 tubes (about fifty-three miles of tubing). *See* Pls.' Beckjord Ex. 10. These features illustrate the magnitude of the project's size. They also contrast sharply with the ordinary routine maintenance practices performed by CG&E staff. *See* Schipper Dep. at 61-62, 120, 183-84, 190-91.

Finally, the project required a lengthy amount of time to complete. Specifically, it took thirteen weeks to complete the project, which by CG&E's own standards made it a "long duration" job and major modification. *See* Schipper Dep. at 33, 161-62, 197; Moreland Dep. at 16, 151. In fact, CG&E and several outside contractors spent thousands of man-hours on the project. *See* Moreland Dep. at 160-61. Based on all of these circumstances, the Court easily concludes that the nature and extend of the Unit 3 project demonstrate that the project was far from routine.

The second project CG&E completed at Beckjord Station was the Unit 2 project. Like the Unit 3 project, the Court concludes that the nature and extent of the Beckjord Unit 2 project show that the project was not routine. Like the Unit 3 project, this project was a life extension project. *See* Pls.' Beckjord Exs. 36, 38-39. The project entailed the use of several contractors and required "a tremendous coordination and planning effort" between contractors and CG&E employees. *See* Pls.' Beckjord Exs. 39, 41, 45-49.

Moreover, similar to the Unit 3 project, the Unit 2 project resulted in modification or replacement of numerous components, some of which were redesigned or upgraded. *See* Moreland Dep. at 103-16, 125-28, 147-51; Schipper Dep. at 117, 120, 145; Pls.' Beckjord Ex. 11. CG&E itself characterized the work as "extensive remodeling" that would result in "extensive improvements." *See* Pls.' Beckjord Ex. 8. Finally, one feature of note was that CG&E had to use a barge-mounted crane to remove approximately 500 tons of old boiler tubing, load the old tubing onto a second barge for transport to a scrap dealer, and unload new tubes from a third barge and lifting them into the plant for installation. *See* Pls.' Beckjord Ex. 50. All of these facts illustrate that the Beckjord Unit 2 project was unique rather than routine. Therefore, the Court finds that the nature and extent of the Unit 2 project overwhelmingly support a conclusion that the project was not routine.

The final project that CG&E undertook at Beckjord Station was the Unit 1 project. Like its predecessors, the nature and extent of the Beckjord Unit 1 project show that it was not routine. The project was a “complete life extension” that involved “extensive modifications.” *See* Schipper Dep. at 89; Pls.’ Beckjord Exs. 5, 58-60, 62. CG&E hired several contractors to assist with the project and conducted extensive pre-outage preparations prior to the start of the project in order to “enable the contractors to complete the large work scope.” *See* Moreland Dep. at 33-35; Pls.’ Beckjord Ex. 58. One notable preparation was the installation of a tower crane to move materials around the site. *See* Pls.’ Beckjord Exs. 58, 60. The crane was so massive that CG&E had to construct a separate concrete foundation just to support the crane. *See* Pls.’ Beckjord Ex. 60. Once the work finally took place, the project took fifteen weeks to complete and resulted in the modification or replacement of fifty-nine distinct components. *See* Pls.’ Beckjord Exs. 58-59, 61. CG&E also replaced forty miles of tubing and performed a “unique repair” on the Unit’s low pressure turbine’s inner shell. *See* Pls.’ Beckjord Ex. 60. Based on all of the foregoing circumstances, the Court has no problem concluding that the nature and extent of the Unit 1 project suggest that the project was not routine.

2. Purpose

The project at Beckjord Unit 3 was designed to obtain an additional thirty years of service from a unit that had “nearly fulfilled the [thirty-five] year average operating life for coal-fired generating units.” *See* Pls.’ Beckjord Exs. 7, 16. As a life extension project, CG&E hoped to restore the Unit to its original capacity rating and efficiency. *See* Pls.’ Beckjord Ex. 5. As reported in CG&E’s Annual Report for 1986, the project resulted in “significantly improved operating efficiency” with less potential outages anticipated. *See* Moreland Dep. at 51-53; Pls.’ Beckjord Exs. 36. The Court finds that the purpose of the Beckjord Unit 3 project weighs heavily against a finding

that the project was routine. *See, e.g., WEPCO*, 893 F.2d at 911-12 (indicating that the purpose of extending the life of a unit beyond its expected retirement date supported the EPA's decision that a project was not routine). *But see United States v. S. Ind. Gas & Elec.*, Cause No. IP 99-1692-C-M/F, 2003 WL 21024595, *3 (S.D. Ind. Apr. 17, 2003) (declining to grant summary judgment in favor of the government where there were significant fact disputes, particularly on the question of whether or not the project was intended to extend a unit's life).

The Beckjord Unit 2 project was likewise a life extension project. The Unit was over thirty-three years old at the time the project began and the project was designed to obtain an additional thirty years of service from the Unit and "to return the [U]nit to its original capacity rating and efficiency, increasing its availability to the system." *See* Pls.' Beckjord Exs. 36, 38-39. CG&E specifically indicated that the work involved "extensive remodeling" and "extensive improvements," and afterward it declared that the project had restored Unit 2 to its original capacity rating and efficiency and added an additional twenty years to the Unit's life. *See* Pls.' Beckjord Exs. 5, 8. Like the Unit 3 project, the Court finds that the purpose of the Unit 2 project clearly supports a finding that the project was not routine.

Finally, the purpose of the Beckjord Unit 1 project indicates that the project was not routine. In its 1987 Annual Report, CG&E characterized the project as a "complete life extension" with the goal of restoring the Unit's original capacity rating and efficiency and adding an additional twenty years to the Unit's life. *See* Pls.' Beckjord Exs. 5, 60. Indeed, the project entailed "extensive modifications" to make these improvements and to provide the Unit with "levels of reliability, availability and efficiency consistent with a new unit." *See* Schipper Dep. at 89; Pls.' Beckjord Exs. 58-59, 62. As with the Unit 3 and 2 projects, the Court easily concludes that the purpose of the Unit 1 project weighs in favor of a finding that the project was not routine.

3. Frequency

As previously noted, the frequency factor is concerned with both the frequency of a project at a particular unit and the frequency of a project within the industry. *See Cinergy Corp.*, 2006 WL 372726, *3; *cf. WEPCO*, 893 F.2d at 911 and 912. With respect to all three Beckjord projects, the Court concludes that the frequency factor weighs in favor of a finding that the projects were not routine.

The project at Beckjord Unit 3 was the first Beckjord project. It involved the replacement of many original components that had never been replaced and have not been replaced in the twenty years since the project. *See Moreland Dep.* at 47-54, 57-93; *Schipper Dep.* at 61-62, 182-97, 204-13; *Pls.’ Beckjord Exs.* 11, 17, 18, 19, 22, 23. Moreover, CG&E recognized that its life extension project was unprecedented in both the Unit’s life and in the industry. *See Pls.’ Beckjord Exs.* 5, 8-11. Indeed, CG&E boasted that the ideas for life extension originated at CG&E in 1981, that it was the first company in the utility industry to perform a “complete” or “full” life extension project, and that this project was being used as the model for study by other utilities in this country and in other countries. *See id.*; *Pls.’ Beckjord Ex.* 36. Accordingly, the Court concludes that projects like the Unit 3 project were both infrequent at the Unit and within the industry. Therefore, the frequency factor underscores the uniqueness of the Beckjord Unit 3 project and shows that the project was not routine.

Similarly, the frequency factor suggests that the Beckjord Unit 2 project was not routine. Like the Unit 3 project, almost all of the components that were replaced in the Unit 2 project were a part of the original equipment that had never been replaced and have not be replaced since the project concluded. *See Moreland Dep.* at 103-16, 125-28, 147-51; *Schipper Dep.* at 117, 120, 145. Moreover, the Court finds no evidence of any projects of similar scope and magnitude being done

in the industry on a regular basis. In fact, Cinergy's exhibits such the Golden Report (Cinergy's Joint Exhibit 128) and various vendor lists (Cinergy's Joint Exhibits 76 and 81 through 87) do not change that finding because those exhibits do not contain sufficient information to demonstrate that projects similar the Beckjord Unit 2 project occurred at the time in question.¹⁴ Therefore, the Court concludes that the frequency factor reveals that the Beckjord Unit 2 project was not routine.

Finally, the Court concludes that the frequency factor is against Cinergy on the Beckjord Unit 1 project. Like the other Beckjord projects, the Unit 1 project involved the replacement of many components that were original, had never been replaced, and have not been replaced since the project. *See* Moreland Dep. at 126-27; Pls.' Beckjord Ex. 62. Moreover, after the Unit 1 project CG&E boasted that it was an industry leader in life extension. *See* Pls.' Beckjord Ex. 60. As with the other Beckjord projects, there is no evidence that the industry was performing projects of a similar scope and magnitude on a regular basis. Therefore, the Court concludes that the frequency factor easily supports a conclusion that the Beckjord Unit 1 project was not routine.

4. Cost

The average annual expenses for boiler and electric plant maintenance during the 1980s were \$2,000,000.00 to \$3,000,000.00 per unit. *See* Pls.' Beckjord Mem., Attach. A. In comparison, the project at Beckjord Unit 3 was originally budgeted for \$15,000,000.00. *See* Schipper Dep. at 164-66; Pls.' Beckjord Ex. 26. Due to its size and cost, the project had to be approved by the company

¹⁴ Even if Cinergy's exhibits could be construed as showing frequency in the industry for any of the projects at any of the plants under scrutiny in this Order, the Court would still conclude that all of the projects in this Order were infrequently performed at the unit in question and, more importantly, that consideration of all of the other factors together would still clearly demonstrate that none of the projects were routine.

president. *See id.* The project eventually cost \$16,300,000.00 and was funded from a capital construction budget rather than from the maintenance budget. *See* Moreland Dep. at 36-37; Pls.’ Beckjord Exs. 29-30. Based on these circumstances, the Court concludes that the cost for the Unit 3 project shows that the project was not routine.

Likewise, the cost for the project at Unit 2 indicate that the project was not routine. The project was originally budgeted for \$18,000,000.00 and ultimately cost \$19,100,000.00. *See* Moreland Dep. at 124-25; Pls.’ Beckjord Ex. 54. This amount clearly exceeds the average annual budget for maintenance expenses at Unit 2. Moreover, like the Unit 3 project, the Unit 2 project was funded from a capital account rather than the maintenance budget and had been pre-approved by the company president due to its size, cost, and complexity. *See* Pls.’ Beckjord Exs. 51-53. Therefore, the Court determines that the cost for the Unit 2 project reinforces the notion that the project was not routine.

Finally, Unit 1’s project cost demonstrates that it was not routine. Like the Unit 3 and Unit 2 projects, the cost clearly exceeded the average annual maintenance expenses for Unit 1. Specifically, the original estimate for the project was \$15,300,000.00, and the project ultimately cost nearly \$20,000,000.00. *See* Moreland Dep. at 92-93; Pls.’ Beckjord Ex. 65. Moreover, the project had to be pre-approved by the company president and the costs were funded from a capital account rather than the maintenance budget. *See id.* In light of the foregoing, the Court concludes that the costs for the Unit 1 project reveal that the project was anything but routine.

5. Conclusion on Beckjord Station Projects

All of the foregoing factors weigh heavily in favor of a finding that the Beckjord Station projects were not routine. The Court concludes that the RMRR exclusion does not apply to those projects.

C. CAYUGA PLANT (UNIT 1)

1. Nature and Extent

Cinergy performed two projects at Cayuga Unit 1: replacement of the reheater front pendants and replacement of the lower slope tubes. The Court finds that the nature and extent of both projects reveal that the projects were not routine.

The reheater front pendant project entailed replacing sixty-five pendants. *See* Simonds Dep. at 141, 173. Each pendant is large in size, being approximately forty-seven feet high, 7.75 feet wide, and 2.5 inches thick. *See* Batdorf Dep. at 30-31; Simonds Dep. at 113; Pls.' Cayuga Ex. 16. The project was so large that it required Cinergy to make a special purchase from a vendor because it did not keep sufficient material on site to do the job. *See* Simonds Dep. at 141, 173. Moreover, Cinergy purchased tubes that had been custom bent, made a material change to the tubes, and hired outside contractors to perform the installation work because it did not have sufficient in-house labor to complete the project in the required time frame. *See id.* at 141, 172-73, 185-86; Batdorf Dep. at 229-30. Finally, Cinergy considered alternatives to the project such as tube shielding, but ultimately rejected those alternatives in favor of complete tube replacement. *See* Pls.' Cayuga Ex. 19. All of these facts suggest that the project went beyond simple routine maintenance, repair, or replacement of parts. Therefore, the Court concludes that the nature and extent of the Unit 1 reheater front pendant project demonstrate that the project was not routine.

Likewise, the nature and extent of the lower slope tube replacement project indicate that the project was not routine. The lower slope tubes are located in the furnace area of the boiler, which is approximately forty-six feet deep and fifty-two feet wide. *See* Batdorf Dep. at 31; Simonds Dep. at 15; Pls.' Cayuga Ex. 9. The front and rear furnace walls consist of a total of 526 tubes. *See* Simonds Dep. at 15; Pls.' Cayuga Ex. 9. Cinergy opted for a complete replacement of almost all of the tubes because its normal maintenance practices of pad welding and spray metalizing were merely delaying complete failure of the unit. *See* Batdorf Dep. at 33, 37, 39-41, 64; Pls.' Cayuga Ex. 11, 14. In order to complete the project, Cinergy hired an engineering firm and outside contractors to assist with the engineering and installation work. *See* Simonds Dep. at 98-99; Batdorf Dep. at 75; Pls.' Cayuga Ex. 15. Moreover, Cinergy had to purchase additional tubing because it did not keep sufficient tubes on site to complete the project. *See* Simonds Dep. at 84-85, 88-89; Batdorf Dep. at 56. Finally, Cinergy had a new feature, wear bars, added to the tubes in order to help prevent slag falls and future tube leaks. *See* Simonds Dep. at 108-09, Batdorf Dep. at 57. All of these circumstances suggest that the project was unlike Cinergy's normal routine practices and that the project was extensive in its scope and magnitude. Therefore, the Court finds that the nature and extent of the project show that the project was not routine.

2. Purpose

Prior to the reheater front pendant replacement project, Cinergy concluded that leaks in the reheater front pendants were jeopardizing the availability of the unit. *See* Pls.' Cayuga Ex. 20. Losses in megawatt hours were part of the justification for the replacement project. *See* Batdorf Dep. at 233; Pls.' Cayuga Exs. 18-20. Cinergy anticipated that replacement would lead to fewer leaks and forced outages. *See* Simonds Dep. at 186-87; Batdorf Dep. at 214. These facts reveal that

Cinergy was doing more than simply maintaining the condition of the tubes in the reheater front pendants; it planned to improve the tubes' condition by rebuilding them. Under the circumstances, the Court concludes that the purpose of the reheater front pendant replacement project evidences that the project was not routine. *See, e.g., Ohio Edison*, 276 F. Supp. 2d at 860-61 (concluding that projects designed to extend life and to improve availability and reliability were not routine).

Similarly, the Court concludes that the purpose of the lower slope tube replacement project weighs against a finding that the project was "routine" within the RMRR exemption of the CAA. Cinergy discovered that those tubes were thinning and ultimately leading to leaks and forced outages. *See* Simonds Dep. at 15; Batdorf Dep. at 77-78. Thus, the availability of the Unit was jeopardized. *See* Simonds Dep. at 18-19; Batdorf Dep. at 77-78. In fact, leaks were jeopardizing the ability of Cinergy to supply steam to a nearby industrial plant. *See* Pls.' Cayuga Ex. 11. Replacement of the tubes was expected to reduce the amount of leaks and forced outages and save the company \$310,000.00 per year in avoided repairs. *See* Simonds Dep. at 61-63; Batdorf Dep. at 100-01; Pls.' Cayuga Ex. 12. Thus, the Court finds that the purpose of the lower slope tube replacement project to avoid repairs, *i.e.*, routine maintenance, weighs against a finding that the project was routine.

3. Frequency

The Cayuga Unit 1 reheater front pendant replacement project appears to have been unique to the Unit. Specifically, the project marked the first and only time in the Unit's history that all of the tubes for the front reheater pendants were replaced in a single outage. *See* Simonds Dep. at 183. While Cinergy has presented some evidence that components were being replaced, *see, e.g.*, Cinergy's Joint Exs. 76, 81-87, 128, the Court has not been presented with any evidence to illustrate

that projects of comparable size, nature, and extent had regularly been done at Unit 1 or within the industry. Therefore, the Court must conclude that the frequency factor is against Cinergy on the Cayuga Unit 1 reheater front pendant replacement project.

Similarly, the frequency factor indicates that the Unit 1 lower slope tube replacement project was not routine. The project marked the only time that an extensive tube replacement was done in a single outage at Cayuga Unit 1. *See* Batdorf Dep. at 144-45; Simonds Dep. at 105. While Cinergy may contend that the project entailed no more than “tubes out, tubes in,” Cinergy has not presented the Court with any evidence that projects of similar size were regularly done at the Unit or within the industry. Therefore, the Court finds that the frequency factor supports a conclusion that the Cayuga Unit 1 lower slope tube replacement project was not routine.

4. Cost

The Cayuga Unit 1 replacement project for the reheater front pendants cost \$1,490,732.93. *See* Pls.’ Cayuga Ex. 22. The cost was treated as a capital expenditure rather than a maintenance cost. *See id.* In comparison to the total expenses for the entire plant in 1995, the cost for this one project was just under half of the total annual expenses. *See* Pls.’ Cayuga Exs. 2-7. While the cost is less than the Beckjord projects or the project in *WEPCO*, the cost is relatively expensive for the Unit and the entire plant. Therefore, under the circumstances, the Court concludes that the cost for the Unit 1 reheater front pendant project reveal that the project was not routine.

Similarly, the cost for the Unit 1 lower slope tube replacement project indicate that the project was not routine. The estimated cost for the project was \$2,145,000.00, and the project had to be approved by the company’s senior vice president. *See* Pls.’ Cayuga Ex. 13. The total project ultimately cost \$1,949,854.24 in replacement costs and \$146,510.75 in equipment retirement costs.

See Batdorf Dep. at 139. The total cost was just slightly less than a third of the annual expenses for the entire plant in 1996. *See* Pls.' Cayuga Exs. 2-7. Further, Cinergy treated the cost as a capital expense rather than an annual maintenance cost. *See* Batdorf Dep. at 139, 141. These circumstances illustrate that the cost for the lower slope tube replacement project was not routine.

5. Conclusion on Cayuga Plant Projects

Based on all of the factors, the Court concludes that the Cayuga Plant projects were not routine. Therefore, Plaintiffs are entitled to partial summary judgment because the RMRR exclusion does not apply to those projects.

D. GALLAGHER STATION (UNITS 1 AND 2)

1. Nature and Extent

Cinergy undertook two projects at Gallagher Station: the retubing of the condenser at Unit 2 and the replacement of the pulverizer system at Unit 1. The Court concludes that the nature and extent of both projects clearly indicate that the projects were not routine.

The first Gallagher Station project was the Unit 2 condenser tubing project. The Unit 2 condenser is a large component consisting of 85,000 square feet of heating surface with 10,920 tubes that are each thirty feet long. *See* Pls.' Gallagher Ex. 54. The condenser is approximately two stories high and sixty feet wide. *See* Renner Dep. at 220. Thus, the sheer size of the condenser reveals that the project was massive in scope.

Moreover, Cinergy conducted extensive planning prior to beginning the project. Specifically, Cinergy completed an in-depth life extension study of the condenser. *See id.* at 188; Orender Dep. at 75-76; Batdorf Dep. at 71-72. Cinergy's regular maintenance process at the time

was to plug leaking tubes by inserting alkaserts into the leaking tubes; however, Cinergy concluded that complete retubing of the condenser was necessary in order to keep the Unit in service. *See* Batdorf Dep. at 74, 86, 115; Pls.' Gallagher Ex. 54. In addition, Cinergy staff met before the project began and decided to use a different material, titanium, for the new tubes. *See* Pls.' Gallagher Exs. 58-60. Cinergy hired an outside firm to perform a galvanic corrosion study on the tube sheets to ensure that the titanium tubes would work in the condenser, and Cinergy hired another firm to advise Cinergy on correcting a design flaw in the tube supports. *See* Batdorf Dep. at 36-38; Renner Dep. at 253-56. In order to correct that flaw, Cinergy opted to adopt a recommendation to add additional tube supports called "tweeners" for the new condenser tubing. *See* Batdorf Dep. at 22-23, 37-38; Renner Dep. at 255-56; Pls.' Gallagher Ex. 60. Finally, Cinergy employed a third outside firm to investigate engineering issues that it expected to arise with the retubing project. *See* Batdorf Dep. at 33-34. After completing the various advanced planning activities, Cinergy hired outside contractors to remove the old condenser tubes and to install the new tubing and the "tweeners." *See* Batdorf Dep. at 24. The project took over three months to complete. *See id.* at 30. In addition, the installation of the "tweeners" was a fairly involved process because the manufacturer had to design a method for scaling the pieces in order to fit them through the condenser opening and then stack them so that they could be assembled, a process that the manufacturer had previously never faced. *See* Renner Dep. at 256-57.

Based on the foregoing circumstances, the Court concludes that the Gallagher Unit 2 project was both unique and massive. More importantly, the Court finds that the nature and extent of the project overwhelmingly demonstrate that the project was not routine.

Likewise, the Court concludes that nature and extent of the Gallagher Unit 1 pulverizer system replacement project reveal that the project was not routine. The project involved the

complete removal of the old system and its auxiliary equipment and replacement of all of the components with refurbished equipment. *See* Snapp Dep. at 155-56. The project was so large that Cinergy formed a special team to plan and prepare for the project. *See* Pls.' Gallagher Ex. 28. Some of the tasks that Cinergy had to complete before installing the new pulverizer system were: purchasing and refurbishing the new pulverizers and other components; dismantling the purchased pulverizers in Canada and transporting them to Gallagher Station; planning the demolition of the old system; and completing various engineering tasks, such as structural engineering for building steel and equipment foundations to support the new pulverizer system. *See* Pls.' Gallagher Ex. 29.

To complete these preparation tasks, Cinergy hired a contractor to dismantle the purchased pulverizers, and transport them. *See* Pls.' Gallagher Ex. 20. The Court can infer that this was no simple task because the base assembly for each mill weighed 52,000 pounds. *See* Pls.' Gallagher Ex. 31. Once the pulverizers arrived, Cinergy employees refurbished them as a training exercise for future maintenance on the system. *See* Curry Dep. at 84; Carchedi Dep. at 65. In addition, further underscoring that the project was not routine maintenance or repair, an architectural and engineering firm had to design a foundation for the new equipment. *See* Pls.' Gallagher Ex. 32. Finally, Cinergy purchased the following: brand new motors for the refurbished pulverizer, which increased the available horsepower over the old motors (from 400hp to 700hp), and three new gravimetric coal feeders, which increased the coal feed rates up to twenty-nine tons per hour. *See* Pls.' Gallagher Exs. 6-7, 33-34.

Following the completion of all of these preparation activities, the installation portion of the project took over two months. *See* Pls.' Gallagher Ex. 38. Cinergy hired an outside contractor to demolish the old system and erect the new one. *See* Curry Dep. at 84; Pls.' Gallagher Ex. 35.

Installation of the new system involved the removal and relocation of several components. *See* Pls.' Gallagher Ex. 36. In addition, Cinergy hired another firm to ensure that the new system was set up properly and would perform at the expected levels. *See* Curry Dep. at 82, 213-14; Batdorf Dep. at 33; Pls.' Gallagher Exs. 39-40. That firm recommended additional modifications to the equipment, which Cinergy ultimately undertook. *See* Curry Dep. at 82; Pls.' Gallagher Ex. 39. Finally, even after the installation of the new pulverizer system and after the Unit was placed back on line, Cinergy still had other tasks and adjustments that required completion, such as constructing a journal monorail, installing ceramic exhauster blades, tempering damper shrouds, and working on the motor sole plates. *See* Curry Dep. at 162-78; Pls.' Gallagher Ex. 41. Many of those items had to be completed during a second planned outage. *See id.*

Based on the foregoing, the Court can only conclude that the Unit 1 pulverizer system replacement project was massive, time-consuming, and involved extensive preparation. The circumstances of the project easily lead the Court to find that the nature and extent of the Unit 1 pulverizer system replacement project demonstrate that the project was not routine.

2. Purpose

In 1985, Cinergy developed a life extension or refurbishment plan for its plants, including Gallagher Station. *See* Pls.' Gallagher Exs. 3-4. The goal of this plan was to extend the life of existing units in order to avoid having to build new units. *See* Pls.' Gallagher Ex. 4. In particular, Cinergy expected to extend the life of Unit 2 from 1995 to 2013. *See* Pls.' Gallagher Ex. 5. Part of the plan for Gallagher Station was the Unit 2 condenser retubing project. Cinergy concluded that Unit 2's main condenser would not be able to remain in service for its life without complete retubing. *See* Batdorf Dep. at 74; Pls.' Gallagher Ex. 54. Cinergy calculated that leaks in the Unit

1 and Unit 2 condensers were costing the company 43,126 megawatt hours. *See* Pls.' Gallagher Ex. 61. Cinergy's regular maintenance practice of plugging the leaks was becoming ineffective, and it concluded that replacement was necessary to avoid increased manufacturing cost. *See id.*; Pls.' Gallagher Ex. 60. These circumstances reveal that the Unit 2 condenser retubing project was intended to extend the Unit's life and to improve the Unit's availability and reliability. Therefore, the Court has no difficulty finding that the purpose of the project supports a conclusion that the project was not routine.

The other Gallagher project was the Unit 1 pulverizer system replacement project. In general, Cinergy hoped that its life extension efforts would extend the retirement date for Unit 1 from 1995 to 2014. *See* Pls.' Gallagher Ex. 5. The pulverizer system was a critical part of the plan because it required the most attention in order achieve this objective. *See* Pls.' Gallagher Exs. 3, 9, 12, 14. The pulverizer system had a history of performance and maintenance problems, including high maintenance on ball mill gear trains and bearings. *See* Pls.' Gallagher Exs. 8-10. Cinergy also experienced various inefficiencies due to the pulverizer system, such as reduced output and deratings, poor control of coal feed rates, and loss of ignition. *See id.* Moreover, Cinergy had experienced over 20,000 megawatt hours of lost generation in 1995 and an impact on profits from pulverizer problems at Unit 1. *See* Batdorf Dep. at 88; Pls.' Gallagher Exs. 7, 19. Cinergy anticipated that replacement of the system would result in an improved ability to burn coal, a decrease in problems, cost savings in terms of fuel flexibility, and reduced operation and maintenance costs. *See* Pls.' Gallagher Exs. 7, 21-22. Indeed, as a result of the project, Cinergy experienced a seven megawatt gain in capacity due to the elimination of some of the problems associated with the pulverizers. *See* Pls.' Gallagher Exs. 43-44. All of these circumstances support a conclusion that the purpose factor weighs heavily in favor of a finding that the pulverizer system

replacement project at Unit 1 was not routine.

3. Frequency

The Court finds that the frequency factor suggests that the Gallagher Station projects were not routine. The first project, the Unit 2 condenser retubing project, involved retubing the condenser in its entirety. *See* Batdorf Dep. at 18, 117; Pls.' Gallagher Ex. 54. The project was the first time in the Unit's history that all of the tubes in the condenser were replaced. *See id.* There is no indication that any projects of similar magnitude were regularly being done in the industry. In fact, the particular project was unique inasmuch as it involved the installation of "tweeners" because the manufacturer of those components had to come up with a design concept for the installation of those components, a situation that the manufacturer had never faced. *See* Renner Dep. at 256-57. Moreover, the uniqueness of the project is underscored by the fact that the two employees responsible for it presented a paper on the subject at an engineering conference. *See* Pls.' Gallagher Ex. 60. Based on these circumstances, the Court concludes that projects like the Unit 2 condenser retubing project were infrequent both at the Unit and within industry; therefore, the Court finds that the frequency factor strongly supports a conclusion that this project was not routine.

Likewise, the Court concludes that the frequency factor shows that the Unit 1 pulverizer system replacement project was not routine. The project was the first of its kind in the Unit's history, and replacement contrasted sharply with the regular maintenance practice of replacing portions of the system like hammers and fan blades. *See* Batdorf Dep. at 74; Cross Dep. at 249. In fact, the project was so large that Cinergy had to put together a special team to work out the installation process. *See* Pls.' Gallagher Ex. 28. Moreover, even though studies had recommended the replacement of the Unit's pulverizer system, the project was delayed for several years. *See* Pls.'

Gallagher Exs. 3, 7, 9, 12-14, 16-17. The Court can infer that had the project been “routine,” the project would not have required the degree of study or planning or resulted in lengthy delays prior to initiation. In short, all of the circumstances indicate that the project occurred infrequently at the Unit and within the industry. Therefore, the Court finds that the frequency factor readily supports a conclusion that the Unit 1 pulverizer system replacement project was not routine.

4. Cost

The Gallagher Unit 2 condenser retubing project resulted in a capital construction cost of \$855,935.64, which did not include additional expenditures associated with removal costs. *See* Batdorf Dep. at 126-27; Pls.’ Gallagher Ex. 63. In comparison, the total annual plant maintenance costs for all four units at the plant between 1987 and 1990 ranged from \$926,399.00 to \$2,088,954.00. *See* Pls.’ Gallagher Mem., Attach. A. Thus, the cost for the single project at Unit 2 was significant, no doubt the reason that it was capitalized. Under the circumstances, the Court concludes that the cost for the Unit 2 condenser retubing project indicate that the project was not routine.

Similarly, the cost of the Gallagher Unit 1 pulverizer system replacement project was significant. That project resulted in a cost of \$4,511,831.00, which was likewise treated as a capital cost rather than a maintenance cost. *See* Batdorf Dep. at 210; Pls.’ Gallagher Ex. 42. In comparison, the total annual boiler maintenance costs for all four of the plant’s units between 1989 and 1999 ranged from \$2,611,223.00 to \$3,895,881.00. *See* Pls.’ Gallagher Mem., Attach. A. Thus, the cost of this single project at Unit 1 exceeded that range of total annual plant maintenance costs for each of the years in a ten-year period. The Court has no doubt that the cost of the Unit 1 project show that the project was not routine.

5. Conclusion on Gallagher Station Projects

The Court concludes that all of the factors weigh heavily in favor of a finding that the Gallagher Station projects discussed in this Order were not routine. Therefore, the Court finds that the RMRR exclusion does not apply to those projects.

E. GIBSON STATION (UNIT 2)

1. Nature and Extent

The single Gibson Station project under scrutiny in this Order is the Gibson Unit 2 project, which involved the replacement of the Unit's reheater tubes. The low temperature section of the reheater consists of two horizontal banks of tubes while the high temperature section consists of ninety-six pendant tubing elements. *See* Pls.' Gibson Exs. 3, 43. Prior to beginning the project, Cinergy hired an outside firm to perform an engineering study on the reheater in order to evaluate the Unit's operation and the use of different metals for the tubes and to predict the Unit's performance with the addition of a furnace nose and extension of the reheater "dogleg" to the fullest extent possible. *See* Pls.' Gibson Ex. 49. Cinergy opted to upgrade the metal in the tubes, hired an outside firm to fabricate the necessary tubes, and hired outside contractors to perform the installation of the reheater upper section. *See* Pls.' Gibson Exs. 54, 58-71. The replacement project was expected to take three months, and, prior to the project, Cinergy and contractor employees met to plan and schedule the project activities. *See* Pls.' Gibson Exs. 9, 72-77. Finally, one notable feature of the project demonstrates its uniqueness: in order to remove the old tube assemblies and install the new tube assemblies, Cinergy had access openings made in the elevated floor of the boiler and the west side of the building so that a monorail could be installed to assist with the project. *See* Barret Dep. at 191-93; Pls.' Gibson Exs. 60, 71. Based on all of these circumstances, the Court

concludes that the nature and extent of the Gibson Unit 2 project clearly indicate that the project was not routine.

2. Purpose

During an analysis in 1993, Cinergy discovered that the Unit 2 reheater tubes were deteriorating and that more than half of the tubes' service life was gone. *See* Pls.' Gibson Exs. 44-45. Indeed, the reheater itself was nearing the end of its useful life and Cinergy determined that tube replacement was required in order to prevent leaks and loss of availability. *See* Pls.' Gibson Ex. 46. In fact, reheater tube leaks and resulting forced outages were identified as one of the largest contributors to Gibson Station's outage rate. *See* Pls.' Gibson Exs. 50-54. Cinergy expected that replacement of the reheater tubes would result in the avoidance of six tube leaks per year of four day's duration each and \$150,000.00 in maintenance repair costs. *See* Pls.' Gibson Ex. 47. All of these circumstances reveal that the purpose of the project was to reduce maintenance costs, improve the Unit's availability, and, ultimately, extend the Unit's life. Therefore, the Court concludes that the purpose of the Gibson Unit 2 project evidences that the project was not routine.

3. Frequency

The Gibson Unit 2 reheater tubing project marked the first time in the Unit's history that the reheater upper section was replaced. *See* Pls.' Gibson Ex. 46. Indeed, prior to the project the reheater was nearing the end of its useful life. *See id.* Clearly, then, the project was infrequent at the Unit. *See Ohio Edison*, 276 F. Supp. 2d at 861 (concluding that defendant had failed to establish frequency of a project where evidence showed that project was considered only once or twice in a unit's lifetime). Moreover, while Cinergy believes that the project was similar to others occurring

in the industry, it has not presented any evidence to suggest that projects at other facilities were comparable to this one in terms of cost, size, etc. Therefore, the Court finds that the frequency factor for the Gibson Unit 2 project demonstrates that the project was not routine.

4. Cost

The Gibson Unit 2 reheater tubing project cost approximately \$3,367,182.00. *See* Batdorf Dep. at 171; Pls.' Gibson Ex. 78. As was the case with the other projects under scrutiny in this Order, the cost of the project was capitalized. *See id.* Thus, the Court concludes that the cost factor of the Gibson Unit 2 project supports a finding that the project was not routine.

5. Conclusion on Gibson Station Project

In light of all of the foregoing circumstances, the Court concludes that all of the factors demonstrate that the Gibson Unit 2 reheater tubing project was not routine. Therefore, Plaintiffs are entitled to partial summary judgment regarding application of the RMRR exclusion to this project.

F. MIAMI FORT STATION (UNITS 5 AND 7)

1. Nature and Extent

CG&E undertook three different projects at Miami Fort Station. The Court concludes that the nature and extent of each project show that the projects were not routine.

The first project was the Unit 5 slope tube and lower waterwall header project. It involved the complete replacement of the Unit's slope tubes and header and included new casings and insulation. *See* Pls.' Miami Fort Exs. 3-4. CG&E employed outside contractors to install the new tubing and the project took eleven weeks to complete. *See* Moreland Dep. at 28-30; Pls.' Miami

Fort

Ex. 6. In addition, CG&E changed the configuration of the boilers by adding casing behind the slope tubes to reduce corrosion. *See* Moreland Dep. at 35-36. These facts reveal that the project was lengthy, extensive, and resulted in improvements to the Unit. Therefore, the nature and extent of the project strongly support a conclusion that the project was not routine.

The next project was the Unit 7 upper waterwall tubing project. The Court notes that this project was likewise extensive. The superheater of the Unit consists of a primary and secondary section, and the primary section is comprised of two horizontal banks of tubes, each with approximately 170 elements. *See* Pls.' Miami Fort Ex. 11. Prior to the project, CG&E hired an outside contractor to complete an inspection report and, subsequently, an Engineering Services Request was submitted to replaced 1000 square feet of tubing on each sidewall of the boiler. *See* Pls.' Miami Fort Exs. 12-13. Once the project began, it involved the installation of flat panels of tubes ranging in width from six to seventeen tubes and ranging in height from twenty-two to thirty-six feet. *See* Pls.' Miami Fort Ex. 16. CG&E opted to use different material for the new tubes, which were also thicker than the original tubes. *See* Pls.' Miami Fort Exs. 11, 16. Finally, the installation process took about a month to complete. *See* Pls.' Miami Fort Ex. 17. Based on these circumstances, the Court concludes that the nature and extent of the project indicate that the project was not routine.

The final Miami Fort project under scrutiny in this Order is the Unit 7 primary superheater replacement project. From the project's inception, CG&E intended to replace the primary superheater in its entirety. *See* Pls.' Miami Fort Exs. 21-23, 29. Moreover, CG&E made a special purchase of the elements for the primary superheater from an outside vendor, from which the Court can infer that the purchase was necessary because of the project's size and the probability that

CG&E did not keep sufficient materials on site to do the project. *See* Pls.’ Miami Fort Ex. 24. The project involved a three-phase approach. *See id.* The first phase entailed replacing sixty elements of tubing along the sidewalls and took approximately one month to complete. *See* Pls.’ Miami Fort Exs. 25-28. Phases two and three involved replacing a total of 110 elements of tubing, adding shields to the tubes that had not been in place for the original tubes, installing insulation, and installing plugs on the first two elements along each sidewall to create “dummy” elements to act as sacrificial metal for future expected erosion. *See* Pls.’ Miami Fort Exs. 28, 34-35, 37-38, 41-43. Phases two and three took about a month each to complete. *See* Pls.’ Miami Fort Exs. 34-35, 43. CG&E used an outside contractor to aid with the installation on this project. *See* Pls.’ Miami Fort Exs. 35, 37-38. Given the magnitude of the project, the length of time needed to complete all three phases, the planning involved, the additions and changes made to the Unit, and the use of an outside contractor, the Court easily concludes that the nature and extent of the Unit 7 primary superheater replacement project demonstrate that the project was not routine.

2. Purpose

In 1989, CG&E assessed Miami Fort Unit 5’s boilers, which revealed that the boilers were in fair to poor condition, were unable to provide reliable service for the next twenty years absent the replacement of tubing and headers, and that replacement of these components was necessary in order to achieve an additional twenty years of reliable operation. *See* Pls.’ Miami Fort Ex. 2. At the time, the boilers and slope tubes were over forty years old and the tubes had deteriorated to approximately 52% of their original wall thickness. *See id.*, Pls.’ Miami Fort Ex. 4. This deterioration inevitably led to tube failures and numerous forced outages. *See id.* Likewise, the headers were deteriorating, and replacement was necessary in order to prevent tube failures and to

ensure unit reliability. *See* Pls.' Miami Fort Exs. 4, 8. Based on these circumstances, the Court concludes that the purpose of the Unit 5 slope tube and header replacement project was not routine.

Similarly, the purpose of the Unit 7 waterwall tubing replacement project indicates that the project was not routine. An inspection in 1988 revealed that the waterwall tubes were thinning. *See* Pls.' Miami Fort Ex. 12. CG&E justified replacement of these tubes by indicating that the Unit had experienced three upper waterwall tube failures in the past year due to damage and had resulted in forced outages. *See* Pls.' Miami Fort Ex. 18. CG&E concluded that unless the tubes were replaced, additional forced outages would occur at an average cost of \$70,000.00 per outage. *See id.* CG&E decided that replacement was necessary in order to prevent these expected failures from occurring. *See* Pls.' Miami Fort Ex. 19. Based on the circumstances, the Court can only infer that the purpose of the project was to save maintenance expenses associated with tube failures and outages and to improve the Unit's availability and reliability. Therefore, the Court finds that the purpose of the Unit 7 waterwall replacement project weighs heavily against a conclusion that the project was routine.

The final project at Miami Fort was the Unit 7 primary superheater replacement project. As far back as 1989, CG&E noted that it was spending \$50,000.00 to \$90,000.00 per year in order to repair or shield tubing in the primary superheater. *See* Moreland Dep. at 149-50; Pls.' Miami Fort Exs. 30-31. This figure was expected to increase yearly. *See id.* CG&E concluded that tube replacement was necessary in order to avoid tube leaks and subsequent forced outages. *See id.* The stated purpose of the project was to eliminate tube leaks, which were the cause of the forced outages, and thereby improve the Unit's reliability and availability. *See* Pls.' Miami Fort Ex. 50. These facts indicate that the purpose of the project was to reduce maintenance costs and to improve unit reliability and availability. Therefore, the Court finds that the purpose of the Unit 7 primary

superheater replacement project demonstrates that the project was not routine.

3. Frequency

The Court first considers the frequency factor with respect to the Unit 5 slope tube and header replacement project. The evidence suggests that the project was the first time that the slope tubes and header were completely replaced in a single project during the entire time that the Unit had been operating. *See* Pls.' Miami Fort Ex. 2. Indeed, those components were approximately forty years old at the time of the project. *See id.* Moreover, there is no evidence that similar projects of this magnitude were regularly being performed within the industry. Therefore, the Court finds that the frequency factor supports the conclusion that the Unit 5 slope tube and header replacement project was not routine.

The Court next considers the Unit 7 waterwall tubing project. Like the Unit 5 project, the evidence suggests that the waterwall tubes had never been replaced in their entirety prior to the project. *See* Pls.' Miami Fort Exs. 11, 17, 19. Furthermore, Cinergy's evidence, such as the vendor lists, do not provide sufficient information from which the Court can infer that projects of similar size and magnitude were regularly being performed within the industry. Therefore, the Court finds that the frequency factor is against Cinergy on the Unit 7 waterwall tubing project.

Finally, the Court considers the frequency factor with respect to the Unit 7 primary superheater replacement project. This project appears to have been the first time that the replacement of the primary superheater was done during the twenty-five years that Unit 7 had been operating. At that time, the primary superheater was nearing the end of its useful life. *See* Pls.' Miami Fort Exs. 11, 28. There is no indication that similar projects have ever been performed at the Unit, and there is no evidence that projects of the same scope and magnitude are regularly performed

in the industry. Therefore, the Court concludes that the frequency factor indicates that the Unit 7 primary superheater replacement project was not routine.

4. Cost

The Miami Fort Unit 5 slope tube and header replacement project cost somewhere between \$1,316,736.34 and \$1,890,948.05. *See* Moreland Dep. at 23-24; Cinergy's Miami Fort Mem. in Opp'n at 12 (citing to Kissell Aff., ¶ 48). The cost was capitalized rather than classified as a maintenance expense. *See* Pls.' Miami Fort Ex. 4. In comparison, the cost of the project was just under the entire combined budget for boiler maintenance at Units 5 and 6 for 1994 and the listed FERC budget for that year. *See* Pls.' Miami Fort Ex. 10. Therefore, the cost of the Unit 5 slope and header replacement project illustrates that the project was not routine.

In contrast, the cost of the Unit 7 waterwall tubing project was not nearly as great as the Unit 5 slope and header replacement project. The original estimated cost of the project was \$538,000.00 plus an additional \$50,000.00 for removal of old materials. *See* Pls.' Miami Fort Exs. 19-20. The project received an initial approved amount of \$665,000.00. *See id.* Cinergy admits that the construction portion of the project was \$393,755.84. *See* Cinergy's Miami Fort Mem. in Opp'n at 13 (citing to Kissell Aff., ¶ 49). Plaintiffs argue, and Cinergy does not dispute, that the cost was treated as a capital expense rather than a maintenance expense. Indeed, Cinergy admits that the project's cost was classified as a "construction/capital" expense. *See* Cinergy's Miami Fort Mem. in Opp'n at 31 (citing to Kissell Aff., ¶ 44). Therefore, the Court concludes that the cost of the Unit 7 waterwall tubing project supports a finding that the project was not routine.

The Court has no problem reaching a similar conclusion on the Unit 7 primary superheater replacement project. The estimated cost for the first phase of that project was \$1,480,000.00 and

the construction portion cost at least \$345,104.00. *See* Pls.' Miami Fort Ex. 27; Cinergy's Miami Fort Mem. in Opp'n at 13 (citing to Kissell Aff., ¶ 50). The total estimated cost for phase two of the project was \$1,631,000.00 for construction plus \$150,000.00 for retirement of old components. *See* Pls.' Miami Fort Ex. 40. Cinergy admits that the construction cost for phase two was at least \$1,250,598.55. *See* Cinergy's Miami Fort Mem. in Opp'n at 13 (citing to Kissell Aff., ¶ 51). Finally, the total estimated cost for phase three was \$1,129,000.00 for construction and \$395,000.00 for retirement of old components. *See* Pls.' Miami Fort Exs. 42, 46-48. Cinergy concedes that the construction portion of the cost for phase three was \$1,121,556.92. *See* Cinergy's Miami Fort Mem. in Opp'n at 13 (citing to Kissell Aff., ¶ 52). Thus, the total cost of the Unit 7 primary superheater replacement project reveals that the project was extensive, and it serves to further underscore the nature and extent of the project as being massive in scope. Finally, Plaintiffs have argued that the cost of this project was capitalized, and Cinergy admits as much in its response. *See* Cinergy's Miami Fort Mem. in Opp'n at 31 (citing to Kissell Aff., ¶ 44). Based on all of the foregoing circumstances, the Court easily concludes that the cost of the Unit 7 primary superheater replacement project demonstrate that the project was not routine.

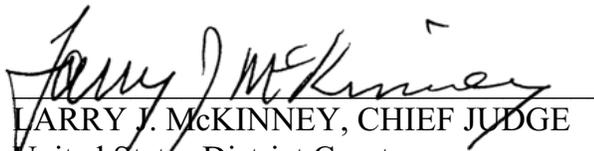
5. Conclusion on Miami Fort Station Projects

Based on a consideration of all of the factors, the Court concludes that the Miami Fort Station projects discussed in this Order were not routine. Therefore, the RMRR exclusion does not apply to those projects.

V. CONCLUSION

For the foregoing reasons, the Court concludes that the projects under scrutiny in this Order were not routine. This does not mean that those projects were “major modifications” under the CAA because Plaintiffs must still demonstrate the projects resulted in a significant increase in emissions. However, it does mean that Plaintiffs are entitled to partial summary judgment on the RMRR exclusion. Therefore, the plaintiff’s, United States of America, and the plaintiff-intervenors’, State of New York, State of New Jersey, State of Connecticut, Hoosier Environmental Council, and Ohio Environmental Council, motions for partial summary judgment regarding the applicability of the RMRR exclusion at the Beckjord, Cayuga, Gallagher, Gibson, and Miami Fort plants (Docket Nos. 560, 588, 590, 592, and 562, respectively) are **each GRANTED**.

IT IS SO ORDERED this 18th day of June, 2007.


LARRY J. MCKINNEY, CHIEF JUDGE
United States District Court
Southern District of Indiana

Distribution attached.

Electronically distributed to:¹⁵

Scott R. Alexander
SOMMER BARNARD ATTORNEYS, PC
salexander@sommerbarnard.com

Kevin P. Auerbacher
STATE OF NEW JERSEY, DEPT. OF LAW & PUB. SAFETY
auerbkev@law.dol.lps.state.nj.us

Christopher D. Ball
NEW JERSEY OFFICE OF THE ATTORNEY GENERAL
christopher.ball@dol.lps.state.nj.us

Deborah Nicole Behles
U.S. DEPARTMENT OF JUSTICE
deborah.behles@usdoj.gov

Samuel B. Boxerman
SIDLEY AUSTIN LLP
sboxerman@sidley.com

David T. Buente
SIDLEY AUSTIN BROWN & WOOD LLP
dbuente@sidley.com

Robert R. Clark
SOMMER BARNARD ATTORNEYS, PC
rclark@sommerbarnard.com

Larry Martin Corcoran
ENVIRONMENTAL & NATURAL RESOURCES DIVISION
larry.corcoran@usdoj.gov

Michael E. DiRienzo
KAHN DEES DONOVAN & KAHN
miked@k2d2.com

Steven David Ellis
ENVIRONMENTAL & NATURAL RESOURCES
steven.ellis@usdoj.gov

Julie L. Ezell
DUKE ENERGY LEGAL DEPARTMENT
julie.ezell@duke-energy.com

Cynthia Marie Ferguson
ENVIRONMENTAL & NATURAL RESOURCES
cynthia.ferguson@usdoj.gov

Richard Mark Gladstein
U.S. DEPARTMENT OF JUSTICE
richard.gladstein@usdoj.gov

Thomas Charles Green
SIDLEY AUSTIN LLP
tgreen@sidley.com

Maurice A. Griffin
NEW JERSEY OFFICE OF THE ATTORNEY GENERAL
maurice.griffin@dol.lps.state.nj.us

R. Keith Guthrie
kgmail@comcast.net

Sarah Dale Himmelhoch
U.S. DEPARTMENT OF JUSTICE
sarah.himmelhoch@usdoj.gov

Eugene J. Kelly Jr.
NEW YORK STATE ATTORNEY GENERAL
eugene.kelly@oag.state.ny.us

Thomas E. Kieper
UNITED STATES ATTORNEY'S OFFICE
tom.kieper@usdoj.gov

James A. King
PORTER WRIGHT MORRIS & ARTHUR LLP
jking@porterwright.com

¹⁵ The Court will not mail copies of this Order to those attorneys of record who have not provided their email address to the Court. As of September 1, 2004, the failure to register for the Court's electronic filing system constitutes a violation of Local Rule 5.7(b). It is the responsibility of co-counsel who are registered to ensure that the entry is distributed to all non-registered counsel, and registered counsel should urge all counsel to comply with the local rule and register to use the Court's electronic filing system so that they may receive notice of future entries from the Court via email. Information on how to register may be found on the Court's website at http://www.insd.uscourts.gov/ecf_info.htm.

Christine F. Lewis
NEW JERSEY OFFICE OF THE ATTORNEY GENERAL
christine.lewis@dol.lps.state.nj.us

Jonathan F. Lewis
CLEAN AIR TASK FORCE
jlewis@catf.us

James A. Lofton
U.S. DEPARTMENT OF JUSTICE
jim.lofton@usdoj.gov

Debra McVicker Lynch
SOMMER BARNARD ATTORNEYS, PC
dlynch@sommerbarnard.com

Jon C. Martin
STATE OF NEW JERSEY, DEPT. OF LAW & PUB. SAFETY
martijon@law.dol.lps.state.nj.us

Kimberly P. Massicotte
OFFICE OF THE ATTORNEY GENERAL
kimberly.massicotte@po.state.ct.us

Carmel Alicia Motherway
CONNECTICUT ATTORNEY GENERAL
carmel.motherway@po.state.ct.us

Michael Joseph Myers
NEW YORK STATE DEPARTMENT OF LAW
michael.myers@oag.state.ny.us

Stephen M. Nickelsburg
SIDLEY AUSTIN LLP
snickels@sidley.com

Scott E. North
PORTER WRIGHT MORRIS & ARTHUR LLP
snorth@porterwright.com

John D. Papageorge
SOMMER BARNARD ATTORNEYS, PC
jpapageorge@sommerbarnard.com

Crissy Lyn Pellegrin
ENVIRONMENTAL PROTECTION AGENCY
pellegrin.crissy@epa.gov

Jean Patrice Reilly
STATE OF NEW JERSEY, DEPT. OF LAW & PUB. SAFETY
reilljea@law.dol.lps.state.nj.us

Robert T. Rosenthal
NEW YORK ATTORNEY GENERAL'S OFFICE
robert.rosenthal@oag.state.ny.us

Jeffrey K. Sands
U.S. DEPARTMENT OF JUSTICE
jeffrey.sands@usdoj.gov

J. Jared Snyder
OFFICE OF THE ATTORNEY GENERAL
jared.snyder@oag.state.ny.us

Kathryn B. Thomson
SIDLEY AUSTIN LLP
kthomson@sidley.com

Katherine Lynn Vanderhook
U.S. DEPARTMENT OF JUSTICE
katherine.vanderhook@usdoj.gov

Gaylene Vasaturo
ENVIRONMENTAL PROTECTION AGENCY
vasaturo.gaylene@epa.gov

Frank R. Volpe
SIDLEY AUSTIN BROWN & WOOD LLP
fvolpe@sidley.com