No. 09-2567

United States Court of Appeals for the Third Circuit

NEW JERSEY ENVIRONMENTAL FEDERATION,
NEW JERSEY CHAPTER OF THE SIERRA CLUB, NUCLEAR INFORMATION
AND RESOURCE SERVICE, NEW JERSEY PUBLIC INTEREST RESOURCE
GROUP AND GRANDMOTHERS, MOTHERS AND MORE FOR ENERGY
SAFETY

Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION, UNITED STATES OF AMERICA

Respondents

and

EXELON CORPORATION

Intervenor.

ON APPEAL FROM THE NUCLEAR REGULATORY COMMISSION DECISIONS CLI-09-07, CLI-08-28 AND CLI-08-23

OPENING BRIEF OF PETITIONERS

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REQUEST FOR ORAL ARGUMENT

New Jersey Environmental Federation, Nuclear Information and Resource Service, Grandmothers, Mothers, and More for Energy Safety, New Jersey Public Interest Research Group, and the New Jersey Chapter of the Sierra Club ("Petitioners" or "Citizens") respectfully request oral argument.

JURISDICTIONAL STATEMENT

On November 14, 2005, Petitioners¹ submitted a timely request for a hearing regarding the lack of monitoring of the severely corroded primary containment system at the Oyster Creek Nuclear Generating Station ("Oyster Creek"). On December 18, 2007, after a two year process during which the Atomic Safety & Licensing Board (the "ASLB" or "Board")² admitted the initial contention, dismissed it as moot, admitted another similar contention, held an oral hearing on the admitted contention, and rejected Citizens' contention. In addition, on October

¹ Petitioners in this case are identical to the parties that participated in the proceedings below, except that Jersey Shore Nuclear Watch is not a party to this case. This brief therefore uses the term "Petitioners" both in the sense of Petitioners in the hearing below and Petitioners to this court. In the hearing below, the Petitioners were referred to as "Citizens," a practice that this brief adopts. In addition, although the applicant in the proceeding below was nominally AmerGen Energy Co. LLC ("AmerGen"), it has now merged into Exelon Generation Co. LLC ("Exelon"), which has taken over the license from AmerGen. Thus, this brief uses the terms AmerGen and Exelon interchangeably.

² The Board is the adjudicatory subdivision of the Nuclear Regulatory Commission ("NRC").

6, 2008 the Commissioners of the Nuclear Regulatory Commission (the "Commission") rejected a petition to suspend the license renewal review of Oyster Creek to allow investigation of the adequacy of the NRC Staff's safety review. On November 6, 2008, the Commission rejected Petitioners' appeal of the Board's rejection of a proposed contention concerning metal fatigue. Ultimately, on April 1, 2009, the Commission issued a final order that largely denied the appeal of the Board's decision, denied a number of petitions regarding the performance of the NRC Staff, referred certain matters to the NRC Staff for further evaluation, and terminated the proceeding. The Commission's final decision provides a very detailed account of the convoluted procedural history of the administrative proceeding below. R-581 at 1-28.

This Court has subject matter jurisdiction to enjoin, set aside, suspend, or to determine the validity of all final orders of the NRC relating to the issuance of licenses. 28 U.S.C. § 2342; 42 U.S.C. § 2239. Petitioners timely filed a Petition for Review with the Court of Appeals for the Third Circuit on May 29, 2009, within 60 days of the Commission's final order in the license renewal proceeding for Oyster Creek, Docket No. 50-0219-LR. 28 U.S.C. § 2344. Venue is proper under 28 U.S.C. § 2343 because the Petitioners reside and/or maintain their principal offices within the jurisdiction of the Court of Appeals for the Third

Circuit.

STATEMENT OF THE ISSUES

- 1. Whether the Commission's decisions to deny Petitioners any reasonable opportunity to obtain hearings on contentions concerning: metal fatigue; the need for additional monitoring of the most severely corroded area of the reactor's containment; and the need for additional monitoring of the lowest portion of the containment violated the Atomic Energy Act ("AEA"), the Administrative Procedure Act ("APA") or are otherwise invalid.
- 2. Whether the Commission's decisions to affirm the findings of the Board and to otherwise defer to the Staff's past and future findings on safety were arbitrary and capricious when: i) the Commission knew that Board's and some of the Staff's findings had been undermined by post-hearing events; ii) the Commission failed to make a definitive finding of safety, but instead left many issues for post-hearing resolution; iii) the Staff's safety reviews at Oyster Creek and other reactors were inadequate; or iv) the applicant had failed to show that Oyster Creek could meet safety requirements throughout the 20-year period of extended operation.

STATEMENT OF THE CASE

Oyster Creek is the nation's oldest operating commercial nuclear power plant. Located in Lacey Township, New Jersey, it was originally licensed on April 9, 1969 for a 40-years term. On July 22, 2005, Exelon filed an application with the NRC to extend its operating license by 20 years. 70 Fed. Reg. 44,940. Citizens successfully petitioned to raise issues about the future safety of a severely corroded region of the steel containment shell at Oyster Creek. R-36³ at 2, 26-44. This region is also called the sandbed region of drywell shell or liner. *Id.* at 25. The adjudicated contention was that the frequency of thickness monitoring of a severely corroded area of the drywell shell was insufficient to ensure that the required safety margins would be maintained throughout any extended period of operation. *Id.* at 33. Eventually, a majority of the Board denied the contention and then a majority of the Commission declined to disturb that decision. R-581.⁴

One member of the Board and on review the entire Commission recognized that some issues regarding the structural strength of the drywell needed further analysis. *Id.* at 35-36, 65-68. Ultimately, the Commission majority conditioned its

³ Initial Decision, *In the Matter Of AmerGen Energy Co, LLC* (License Renewal for Oyster Creek Nuclear Generating Station, LBP-07-17 (December 18, 2007) (the "Board Decision")

⁴ Memorandum and Order, *In the Matter Of AmerGen Energy Co, LLC* (License Renewal for Oyster Creek Nuclear Generating Station, CLI 09-07, 4 (April 1, 2009) (the "Final Decision")

final safety finding on a referral of these issues to the Staff. *Id.* In addition, after considering post-hearing events that undermined various decisions by and assertions of the applicant, the Staff, and the Board, the Commission directed the NRC Staff to address various other issues relating to the monitoring of the drywell shell that had been raised by Petitioners. *e.g. id.* at 28 n. 121; 82, Dissent of Commissioner Jackzo.

In addition to adjudicating the admitted contention, during the proceeding the Board denied eight attempts by Citizens to add new contentions on various issues, primarily upon procedural grounds. R-36 at 10 n. 14. The Commission also refused to admit a contention regarding metal fatigue that arose after the Board had made its initial decision. R-546.⁵ The Commission also refused to instruct the Staff to show what it had actually done during the safety review or to improve the quality of its safety review for the license renewal of Oyster Creek in spite of a number of Petitions for such action by Citizens that showed material failures in the Staff's safety reviews. R-540.⁶

This appeal concerns whether these decisions violated the AEA, the

⁵ Memorandum and Order, *In the Matter Of AmerGen Energy Co, LLC* (License Renewal for Oyster Creek Nuclear Generating Station, CLI 08-28 (November 6, 2008) (the "Metal Fatigue Decision")

⁶ E.g. Memorandum and Order, *In the Matter of AmerGen Energy Co, LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-08-23, Memorandum and Order, dated October 6, 2008 (the "Supervision Decision").

Administrative Procedure Act ("APA"), or the Commission's own regulations or are otherwise invalid.

STATEMENT OF FACTS

Oyster Creek was initially granted its construction license in 1964, and is currently the oldest commercial nuclear power plant in the nation still in operation. *See* Safety Evaluation Report Related to the License Renewal of Oyster Creek Generating Station ("SER"), R-590 at 1-1. Located approximately 50 miles south of Newark, New Jersey and 50 miles west of Philadelphia, Oyster Creek is a boiling water reactor with a Mark 1 containment. *See id.* Based on 2000 U.S. Census Bureau data, approximately 4.2 million people live within 50 miles of the site.

The relicensing hearing occurred within the NRC's present regulatory framework, which has undergone a number of changes that have severely limited public participation. Roisman, Anothony Z. et al., Nuclear Power in the New Millennium, 26 Pace Envtl. Law Rev. 317, 318-19 (2009). For example, the Oyster Creek relicensing hearing was the first-ever public hearing on a relicensing application. Webster, R, Spotlight on Safety at Nuclear Power Plants: The View from Oyster Creek, 26 Pace Envtl. Law Rev. 365, 382 (2009). Further, at least 55 of the 104 nuclear power plants in this country have renewed their licenses without

any hearing. Id.

I. Safety Significant Issues Identified By Citizens During The Oyster Creek Relicensing Review

A. The Aging Management Of The Drywell Shell Needed To Be Improved

The drywell shell is a relatively thin freestanding carbon steel shell shaped like an inverted lightbulb that enclosed the nuclear reactor and is designed to contain radioactive leaks in the event of an accident. LBP-07-17, R-437 at 2. It is a vital safety component that is over 100 feet tall, is spherical in its lower portion with a diameter of approximately 70 feet. *Id*. Towards the bottom of the freestanding part of the shell, there is a region called the sand-bed, which was originally designed to be 1.154 inches thick. *Id.* at 6. This sand-bed portion of the drywell shell became severely corroded during operation due in part to the improperly constructed drains allowing water to remain in the region. *Id.* at 5-6. In this region the steel shell has suffered from general corrosion to the extent that one area is approximately half as thick as it was when originally constructed and large areas are below 0.8 inches thick. E.g. Citizens Ex. 61, R-268 at Figure 1-4; Citizens' Ex. CR 4, R-514, Attached Memorandum at Figures 3-13. The Board has estimated that if the shell experiences another 0.064 inches of general corrosion, it would fail one the safety requirements, which are called sometimes termed

acceptance criteria. R-437 at 16-17.

Initially, Exelon used measurements that subsequently proved erroneous to justify not taking any more thickness measurements. R-590 at 4-53 to 4-55. Exelon improved the monitoring of the shell 5 times during the relicensing process. R-437 at 7-9. Even now thickness monitoring covers less than 0.5% of the sandbed region. Citizens' Ex. 42, R-281. Because of the limited spatial scope of these measurements, it is possible that the shell fails one of currently applied acceptance criteria. Citizens' Ex. 61, R-268. Finally, even though there was water in the sand-bed region at the last outage, the moisture monitoring did not detect it. R-581, Jackzo Dissent at 3-4.

B. Prediction of Metal Fatigue for the Recirculation Nozzles Did Not Initially Meet Requirements

On April 3, 2008 the NRC Staff notified the Commission that use of a simplified method to predict when metal fatigue of recirculation nozzles at Oyster Creek could become problematic did not meet the requirements of the applicable engineering code and may not be conservative. Memorandum from Samson S. Lee to the Commission, dated April 3, 2008, R-475. On April 18, 2008, Citizens filed a contention regarding metal fatigue with an accompany declaration from the same expert who had first found this problem during the relicensing proceeding concerning Vermont Yankee nuclear power plant. Citizens' Ex. MFC-1, R-476 at

¶¶ 1-5. He further stated that when the correct code was used at Vermont Yankee the result increased by 40% and that even using the simplified calculation, the metal fatigue at Oyster Creek was on the brink of violating regulatory requirements. *Id.* at ¶¶ 6, 9.

After the metal fatigue contention was fully briefed to the Commission, AmerGen submitted a letter to the Commission attaching a summary of the confirmatory analysis and alleged it showed the original analysis was acceptable. Letter from Polonsky to Klein, dated May 5, 2008, R-484, Enclosure at 4. Citizens subsequently showed that the summary tacitly acknowledged that elements of the original analysis were non-conservative. Citizens' Ex. MFC-2, R-496 at ¶ 6 In addition, because the letter and attachment contained no reactor-specific justification for the use of a less conservative assumption in the reanalysis, Citizens' expert opined that it failed to show that the reanalysis was conservative. *Id.* at ¶¶ 10-11.

On September 19, 2008, after the appeal on this issue was fully briefed, Staff issued a supplementary Safety Evaluation Report ("SER Supplement"). R-534. Citizens' expert found that the SER Supplement contained previously undisclosed information about how the confirmatory analysis was conducted, which was that the "maximum transient temperatures" were apparently used to determine the

environmental correction factor. *Id.* at 4-3. Dr. Hopenfeld therefore supplied comments to Citizens stating that this procedure would have led to a large underestimate of the environmental correction factor, leading to an underestimate in the amount of metal fatigue. Comments of Dr. Hopenfeld (attached to Letter from Webster to Klein, dated October 14, 2008), R-541 at 2.

Even though Citizens diligently tried to obtain the detailed metal fatigue analyses, they were never able to review these documents. For example, the NRC Staff made the metal fatigue analysis unavailable to Petitioners through the Freedom of Information Act ("FOIA") by the simple device of reviewing the analysis in Exelon's Washington, D.C. office instead of at the NRC's headquarters, which is close to Washington, D.C. NRC Response to FOIA Request 2008-0283, dated August 13, 2008 (R-613).

C. Commitment Tracking Program Was Inadequate

The Oyster Creek license renewal proceeding also revealed the NRC Staff's failure to independently verify whether the licensee was fulfilling its commitments to maintain plant equipment. During the Oyster Creek relicensing review, inspectors accidentally discovered that the licensee had failed for at least eight years to carry out a written commitment to monitor the flow of water from the sandbed drains. Letter from Jill Lipoti, State of New Jersey, to Samuel J. Collins,

NRC (September 13, 2006). Having found such a surprising oversight, the Staff merely accepted an approach in which the missed commitment became a new commitment. SER at A-20 to A-21. Thereafter, the Staff merely accepted the applicant's assurance that it would "reinforce strict compliance with commitment implementation in the future." *Id.* at 1-16, 4-68.

Exelon documents showed that the unmonitored drain was the symptom of a much larger problem: a complete lack of historic commitment tracking. A licensee employee reviewing the missed commitment noted that "the age of OC [Oyster Creek] has resulted in an enormous volume of regulatory correspondence that had not been reviewed in searching for commitments. Commitments were not tracked for all the years of OC operation." Memorandum from Kathy Barnes re: Exelon Nuclear Issue – Statement of Confirmation at OCLR 15509-10 (November 13, 2006), Citizens Ex. 47, R-285. The consequences of this issue are that "without having a commitment tracking system or proper disposition of these historical commitments renders the site [vulnerable] to potential repeat occurrences of missed commitments. . . . " *Id.* at OCLR 15510.

Although the applicant and the Citizens were able to readily identify the lack of a commitment tracking system as a programmatic problem, it appears that Staff did not. The SER makes no mention of the need to improve the tracking of historic

commitments. *E.g.* SER at 1-16, 4-68. The Staff extracted no formal commitment from the applicant to remedy the systemic problems with commitment tracking that were identified by the licensee's internal review. SER at A-3 to A-63.

D. The Office of the Inspector General Found that Staff Reviews Were Inadequately Documented, Inconsistently Executed, Unreliable, and Unverifiable

During the proceeding, the NRC Office of Inspector General ("OIG") conducted an audit of the license renewal program, which found major shortcomings in the safety reviews for the relicensing of Oyster Creek and 12 other reactors. R-588 ("OIG Report"). After reviewing over 450 samples of NRC Staff reports from a representational array of 13 plants, including Oyster Creek, the OIG found that in virtually no case had the Staff provided an adequate degree of documentation for its review. *Id.* at 7-10. Three quarters of the report samples failed to address the factor of operating experience, despite its critical role in the license renewal process. *Id.* at 8-9, In an alarming number of cases, the Staff merely copied the words of the license renewal application – which in some instances had been copied from NRC guidance, leading to a circular and virtually meaningless safety review. *Id.* at 10-11, 45-47; R-461 (Staff Answer) at 18.

Examining a potential cause for these problems, the OIG found that Staff's guidance for conducting license renewal reviews was incomplete, poorly

understood, and in some cases actually hindered the reviewers. OIG Report at 11-21. In the OIG's analysis, these failures "cast doubt as to what, exactly, NRC did to independently review the licensee's program other that restate what was provided in the renewal application." *Id.* at 10. In addition "readers of the safety reviews could [reasonably] conclude that regulatory decisions are not adequately reviewed or documented." *Id.* at 12. For example, the reviewers were severely hampered by prohibitions on removing licensee documents from reactor sites, which were designed to prevent these documents from becoming subject to FOIA. *Id.* at 14-17. In addition, it was agency policy to destroy any licensee documents once the reviewer completed her report. *Id.* at 15.

Moreover, the OIG's inquiry into license renewal review for the Oconee nuclear power plant indicates that the problem identified by the OIG is more serious than a failure to document the Staff's safety review – in fact, the Staff may not have conducted any effective reviews at all. *Id.* at 21-23. The failings in the NRC Staff's review process are not altogether surprising because OIG also found that there was no quality management system in place to ensure the NRC reviews are carried out in accordance with Commission's expectations. The agency failed to take the first step towards quality by failing to set formal requirements for report writing, *id.* at 11, or review of plant-specific operating experience. *Id.* at 20-21.

Furthermore, the agency had no controls in place to monitor and enforce whether the anticipated review of operating experience actually took place. *Id.* at 21.

A subsequent Memorandum by the Inspector General confirmed that it is very difficult based upon the currently available documents for the Commission to verify whether the Staff did a thorough review, because the audit reports that are available are not very detailed and NRC Staff reviewers disposed of their working papers. R-486 at 3-5. Furthermore the ASLB's experience in reviewing the Staff's documentation of its safety and environmental reviews in completed early site permit cases confirmed Petitioners' concern that the Staff's safety reviews are not logical or adequately documented. Petition re: OIG Report, dated January 3, 2008 ("OIG Petition"), R-453 at 19-21. In no case was the ASLB able to rely on the Staff's safety findings, without providing further analysis, explanation and documentation. *Id.*

RELATED CASES AND PROCEEDINGS

No other appeals relating to the proceeding below are pending. A related appeal that has been finally decided concerned an appeal by the State of New Jersey from the Commission's decision to deny the contentions submitted by the

⁷ The memorandum is somewhat unclear on exactly when the Staff disposed of the working papers, but, at least in the case of Oyster Creek, it was long before the agency granted the renewed license.

State. New Jersey Dept. of Env'tl Protection v. NRC, 561 F.3d 132 (3d Cir. 2009).

STANDARD OF REVIEW

Under the APA a reviewing court may set aside an agency action if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). This standard applies to grants of operating licenses to nuclear power plants by the Commission. *Limerick Ecology Action Inc., v. NRC*, 869 F.2d 719, 728 (3d Cir. 1989). Actions are arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) *accord NVE Inc. v. Dept. of Human Health and Services*, 436 F.3d 182, 190 (3d Cir. 2006).

Thus, the NRC's authority is limited in so far as it "may not act precipitously or in an irrational manner." *Citizens Awareness Network, Inc. v. NRC*, 391 F.3d 338, 352 (1st Cir. 2004). In addition, the reviewing court is required to undertake a "substantial inquiry" subjecting the agency's action to "a thorough, probing, indepth review." *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415

(1972).

While the Court's review of factual findings is deferential, the Court reviews questions of law de novo or at least with much less deference. *New Jersey Dept. of Env'tl Protection v. NRC*, 561 F.3d 132, 137 n. 4 (3d Cir. 2009). Although courts generally defer to an agency interpretation of its own regulations, the agency may not infer language that does not exist in the regulation. *Beazer East v. EPA*, 963 F.2d 603, 606 (3d. Cir. 1992). In addition to ensuring that the agency's interpretation is consistent with the language of the regulation, a court also needs to assure itself that as applied the regulations are "consistent with the statute under which they are promulgated." *United States v. Larionoff*, 431 U.S. 864, 872-73 (1977) (citations omitted). Finally, this Court should exercise plenary review of the Commission's compliance with statutes is does not administer, such as the APA. *Citizens Awareness Network, Inc. v. NRC*, 391 F.3d 338, 349 (1st Cir. 2004).

Another task for a court reviewing the NRC's regulatory interpretations is to inquire into their consistency with both the stated purposes of the regulations and other interpretations of the same regulations. The Supreme Court has held that the Commission's interpretation of its regulations should be accepted only if it "sensibly conforms to the purpose and wording of the regulations" and is "consistent with prior agency decisions." *Northern Ind. Public Serv. Co. v. Porter*

County Chapter of the Izaak Walton League of America, 423 U.S. 12, 14-15 (1975). A reviewing court thus must ensure that the agency has treated like cases similarly or provided a reasoned explanation for any variations. *Airmark Corp. v. FAA*, 758 F.2d 685, 691-92 (D.C. Cir. 1985).

STATUTORY AND REGULATORY BACKGROUND

The Atomic Energy Act ("AEA") of 1954 limits the original license of commercial nuclear power plants to forty years. Section 103 of the AEA, 42 U.S.C. § 2133, grants the Commission authority to issue licenses for the commercial exploitation of special nuclear material. Prior to issuing such licenses, the Commission is required to find that the authorized use of special nuclear material is "in accord with the common defense and security and will provide adequate protection to the health and safety of the public." An equivalent "not inimical" standard also applies to reactor licensing. Anticipating a possibility that reactors might operate for longer than forty years, the AEA states that such licenses "may be renewed upon the expiration of" the initial licensed period. The safety requirements of the AEA apply equally to decisions regarding initial licensing and license renewal. Finally, the AEA provides that in any licensing proceeding, the

⁸ 42 U.S.C. § 2011.

⁹ 42 U.S.C. § 2232(a).

^{10 42} U.S.C. § 2133(d).

¹¹ 42 U.S.C. § 2133(c).

¹² Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,961 (Dec. 13,

Commission shall grant a hearing at the request of any potentially affected party.¹³

I. The NRC Has Limited The Scope of License Renewal Proceedings

In the early 1980s, the NRC first started to address the regulatory standards for license renewal. As a result of that effort, the agency decided in 1991 that "age related degradation will be critical to safety during the term of [a] renewed license." Accordingly, the Commission established a requirement for a plantwide review of age-related degradation. The regulations also required licensees to demonstrate that they had effective programs for management of aging equipment. At that time, the NRC excluded other issues, such as emergency planning or updating the safety requirements because the NRC believed they were adequately addressed by other existing regulations. The regulations of the NRC believed they were

In 1995, the Commission further narrowed the scope of the plant-wide review. It decided that with the possible exception of age-related degradation of long-lived passive components, the safety-related effects of aging are adequately managed by the ongoing regulatory scheme.¹⁸ Thus, the Commission narrowed the

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¹³ 42 U.S.C. § 2239(a)(1)(A).

¹⁴ 56 Fed. Reg. at 64,946.

¹⁵ *Id.* at 64,960.

¹⁶ *Id.* at 64,955.

¹⁷ *Id.* at 64,959.

¹⁸ Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,464 (May 8, 1995).

scope of the safety review conducted upon relicensing to cover only age-related degradation of long-lived passive components.¹⁹ In narrowing the scope of the equipment covered by the rule, however, the NRC did not alter the fundamental principles underlying the 1991 rulemaking, including that: (a) age-related degradation poses a threat to the continued safe operation of nuclear power plants, and (b) the objective of the relicensing process is to identify additional aging management programs to provide reasonable assurance that the the safety standards required by the license (the "Current Licensing Basis" or "CLB") will be maintained throughout the license renewal period.²⁰

The current regulations therefore allow nuclear power plants to renew their original 40 year licenses in a manner that allows the plants to operate for up to 20 years longer. 10 C.F.R. § 54.31. A renewed license may only be issued if the Commission finds that there is reasonable assurance of compliance with the CLB during the proposed period of extended operation. 10 C.F.R. § 54.29. The applicant bears the burden of showing the agency that it has adequate aging management programs to ensure that the CLB is met throughout the proposed additional 20 years of operation. 10 C.F.R. § 54.21(a). Furthermore, in an

 $^{^{19}}$ *Id.* at $2\overline{2,464}$.

²⁰ *Id.* at 22,464.

operating license proceeding, the licensee bears the ultimate burden of proof.²¹

II. Citizens Have A Statutory Right To A Hearing On All Material Issues Raised By License Renewal

Section 189(a) of the AEA grants the interested public the right to a hearing on all issues that are material to licensing.²² This hearing right was the subject of a number of cases, which established that, although the NRC may restrict the hearing right in the name of efficiency, it cannot entirely unreasonably curtail the public's opportunity to obtain a hearing on an issue that is material to the licensing decision. For example, the court invalidated an NRC rule that allowed emergency planning exercises to be held after initial licensing because it meant public intervenors could never obtain a hearing concerning the outcome of those exercises, contravening the statutory hearing right. *Union of Concerned Scientists* v. NRC, 735 F.2d 1437, 1438-50 (D.C. Cir. 1984) ("UCS I"), cert. denied, 469 U.S. 1132 (1985). In a second case regarding amendments to the NRC's procedural rules, the court confirmed that "Section 189(a) [of the Atomic Energy Act, 42 U.S.C. 2239(a),] prohibits the NRC from preventing all parties from ever raising in a hearing a specific issue it agrees is material to [a licensing]. . . decision." *Union* of Concerned Scientists v. NRC, 920 F.2d 50, 53 (D.C. Cir. 1990) ("UCS II").

²¹ Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), ALAB-697, 16 N.R.C. 1265, 1271 (1982).

²² Atomic Energy Act of 1954 § 189(a), 42 U.S.C. § 2239(a).

Thus, the NRC may structure its procedural approaches to hearings in a manner that excludes claims of little import or places reasonable constraints upon members of the public who wish to exercise their hearing rights.

A. The NRC Has Placed Strict Procedural Restrictions Upon the Statutory Hearing Right

To implement the statutory requirements, while attempting to make the process as efficient and predictable as possible for applicants, ²³ the agency has imposed a process in which petitioners who wish to obtain a hearing identify deficiencies in the license renewal applications that they believe need to be resolved before the licensing decision can be taken. These propositions are known as contentions and the Commission has established "strict contention admissibility standards." Final Decision (R-581) at 56. The Commission has also described this process as "strict by design." *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 N.R.C. 349, 358 (2001). Once petitioners show that one or more of their contentions meet the admissibility requirements, they become known as intervenors, and litigation regarding the contentions formally commences.

B. The NRC Has Imposed Strict Pleading Rules

The rules establishing the strict standards regarding contention admissibility

²³ UCS I at 1446-48; 60 Fed. Reg. 22,461, 22,464.

are provided by 10 C.F.R. § 2.309. Before the proceeding can formally commence intervenors must do far more than is required to commence a proceeding in federal district court. The rules require pleading of specific issues in specific ways. As such, they are reminiscent of the strict pleading standards formerly required by the English chancery courts.

Among other things, the regulations require petitioners to "[d]emonstrate that the issue raised in the contention is material to the findings the N.R.C. must make to support the action that is involved in the proceeding."²⁴ A showing of materiality requires a "minimal showing that material facts are in dispute, indicating that a further inquiry is appropriate."²⁵ Importantly, adjudication of the material issues in dispute is not permitted at the contention pleading stage. *Sierra Club v. N.R.C.*, 862 F.2d 222, 228 (9th Cir. 1988). The purpose of this limitation is to "ensure that the parties are not required to prove their contentions before they are admitted in the proceedings." *Id.* at 228.

C. The NRC Has Imposed Strict Timeliness Restrictions

In addition to the other requirements, any contention must be timely. This determination is not difficult at the outset, when the agency sets a clear deadline

²⁴ 10 C.F.R. § 2.309(f)(1)(iv).

²⁵ Georgia Inst. Tech., CLI-95-12, 42 N.R.C. 111, 118 (1995); Rules of Practice for Domestic Licensing Proceedings - Procedural Changes in the Hearing Process, 54 Fed. Reg. 33, 171 (Aug. 11, 1989).

for submitting initial contentions. After the initial filing deadline has passed, the rules provide for the filing of new contentions based upon newly discovered information. This is essential for AEA compliance, because the time to file initial contentions is placed at a very early stage, when the renewal application is docketed. *Entergy Nuclear Vermont Yankee L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, slip op. at 6 n. 12 (November 7, 2007). The *Vermont Yankee* Board noted that "normally a great deal of new and material information becomes available to the public after the docketing" through application amendments or the safety evaluation report. LBP-07-15, slip op. at 6 n. 12. This information can then be used to file new contentions, satisfying the AEA requirement that the public must be afforded an opportunity to request a hearing on all material safety issues. *Id.*

Although the text of the rules is somewhat unclear, the Board, in a number of decisions, has recognized that petitioners may add both environmental and safety contentions²⁶ after filing their initial petition, if they act in accordance with 10 C.F.R. § 2.309(f)(2).²⁷ This Section requires a showing that the new contention

²⁶ In licensing proceedings before the ASLB, petitioners may proffer safety contentions based upon the requirements of the AEA and the National Environmental Policy Act ("NEPA").

²⁷ See, e.g., Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-05-32, 62 N.R.C. 813 (2005); AmerGen Energy Company (License Renewal for Oyster Creek Nuclear Generating Station), LBP-06-16, 63

is timely filed based upon materially different new information. 10 C.F.R. § 2.309(f)(2)(i)-(iii). Contentions are considered timely filed if they are filed within 30 days from the availability of the new information upon which the new contention is based. *E.g. Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-4, 59 NRC 31, 46 (2004).

However, in the absence of new information the test to determine whether contentions are timely is more stringent. LBP-07-15 slip op. at 6. Petitioners must then satisfy the requirements for a late-filed contention in 10 C.F.R. § 2.309(c), which allows late-filed contentions to be admitted based upon a balancing of eight factors, the most important of which is good cause. *Commonwealth Edison Co.* (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 NRC 241, 244 (1986).

D. The NRC Rules Impose Even More Restrictions Upon Raising Issues That Arise After The Hearing Has Closed

Where new information arises after the hearing record closes, petitioners nominally have to meet even more stringent hurdles to get a hearing based upon the new information. In accordance with 10 C.F.R. § 2.326(a), a motion to reopen the record must: be timely, address a significant safety issue, and show that it could materially affect the decision before the Commission. In addition, a motion to

N.R.C. 737, 744-45 (2006).

reopen which relates to a contention not previously in controversy among the parties must also satisfy the requirements for non-timely contentions in § 2.309(c). 10 C.F.R. § 2.326(d).

As discussed in the argument section, courts have found that this stringent reopening standard may not be used to exclude contentions that raise a wholly new issue that has not been litigated.

SUMMARY OF ARGUMENT

This case involves challenges by Citizens to a number of decisions by the NRC that allowed Oyster Creek's operating license to be extended for twenty years. The NRC violated the AEA and the APA when it renewed the licensing because it: i) denied Citizens a reasonable opportunity to exercise the hearing right granted by the AEA to obtain a hearing on a number of issues that were material to relicensing; ii) failed to make the required definitive finding of safety, but instead left many issues for post-hearing resolution; iii) deferred to the Board's and Staff's safety findings in many areas even though it knew that many of the Board and Staff's findings had been undermined by post-hearing events and the Staff's safety reviews at Oyster Creek and other reactors were inadequate and could not be relied upon; or iv) did not have sufficient information to make the required definitive finding because contrary to the NRC's regulations, the applicant had failed to show

that Oyster Creek could meet safety requirements throughout the 20-year period of extended operation.

The NRC has repeatedly sought to limit the hearing right conferred upon the public by Congress in the AEA in the name of efficiency, stability and predictability. It has been so successful in this endeavor that of the over fifty-five license renewals granted, only the relicensing of Oyster Creek has been subject to an adjudicatory hearing. Citizens successfully raised one issue, which exposed a series of mistakes that had been made by the licensee and the Staff, and ultimately resulted in an enhanced review of many of the issues raised. Contrary to the AEA, the NRC used its strict procedural rules to deny Citizens any reasonable opportunity for a hearing on many issues that could have affected relicensing.

In addition, once put into action, the rules that were supposed to promote efficiency actually created an unwieldy proceeding replete with motion practice about arcane legal issues. Finally, instead of obeying the strict procedural requirements of the AEA, which require a definitive finding of safety, just over one week before Oyster Creek's initial operating license was set to expire, a majority of the Commission rushed to allow the Staff to grant the renewed license without resolving many outstanding issues.

In the final analysis, the Commission had cumulative documentary evidence

before it showing that the Staff's safety review of the licensee's application was poorly documented, poorly executed, and had missed material issues, but it failed to address these issues. The Commission was also fully aware that the applicant had failed to show that it had met all the prerequisite requirements for licensing. For example, it explicitly conditioned its safety finding upon a post-licensing Staff review of the structural strength of the drywell and exhorted Staff to deal with other unresolved issues effectively. Thus, at minimum, the Commission should have required additional work from the Staff and, in turn, the applicant, to ensure that it could make the required definitive finding that the aging of the nation's oldest nuclear power plant would be managed in a manner that ensures its safety for an additional 20 years.

Despite the repeated dissents of the current chair of the Commission and warnings from one of the two technical judges on the Board that structural issues and metal fatigue issues had not been adequately dealt with, the majority plunged ahead without resolving the many open issues in an apparent attempt to avoid the expiration of the operating license. This failure was contrary to law, because the Commission failed to make its own definitive findings on the safety issues raised, affirmed the Board's finding that it knew to be fatally flawed, failed to require the applicant to supply the required information to establish safety, and unreasonably

relied upon the Staff's definitive findings that it knew were inadequate.

ARGUMENT

I. The NRC Made Many Procedural Errors Which Violated Petitioners' Hearing Rights

In the name of upholding strict procedure, the NRC often interpreted its procedural rules in a manner that violated Petitioners' right to a hearing on material issues. In addition, many of the procedural exclusions also violated elementary notions of fairness, which the agency has found to be a "cardinal rule" of licensing proceedings. *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-565, 10 N.R.C. 521, 524 (1979).

A. The NRC Unlawfully Denied a Valid Contention Regarding New Commitments to Carry Out Ultrasonic Measurements After License Renewal

On June 6, 2006 the Board decided that Citizens' initial contention concerning a lack of periodic ultrasonic testing ("UT") of the thickness of the sandbed region of drywell shell had been rendered moot by AmerGen's April 4, 2006 commitment to take such measurements once every ten years. *AmerGen Energy Co*, LLC (License Renewal for Oyster Creek Nuclear Generating Station), LPB-06-16, 63 NRC 737 (2006), R-83 at 8; LBP-06-22, 64 NRC 229 (2006), R-99 at 2. The Board simultaneously gave Citizens the opportunity to file a new contention regarding the new monitoring program for the sand bed region. R-83 at 9-10. In

response to this invitation, Citizens sought to raise seven discrete, but interconnected, issues in a contention challenging the acceptance criteria, the monitoring frequency, the protocol for the monitoring of moisture, the proposed response to wet conditions, the spatial scope of the proposed measurements, and quality assurance program for the measurements, and the statistical methods for analyzing the UT results. R-99 at 9.

The Board admitted the part of the contention concerning the monitoring frequency, but excluded all the other issues. *Id.* at 36. The Board admitted the frequency contention because it was based on materially different, new information in commitments submitted by AmerGen on April 4, 2006 and June 20, 2006 and therefore satisfied the timing requirements of 10 C.F.R. §2.309(f)(2). *Id.* at 3-4, 14-15. The Board dismissed all the other issues on timeliness grounds. *Id.* at 11-14, 21-23, 25, 26-27, 28-31, 33-36.

The Board's internally inconsistent decision to admit the element of the contention contesting the monitoring frequency as timely, while excluding challenges to all the other aspects of the proposed UT monitoring regime on timeliness grounds is arbitrary on its face. Furthermore, the decision violated the AEA hearing right because AmerGen did not propose any additional UT monitoring of the drywell shell during the period of extended operation until April

4, 2006, R-99 at 3-4, making it impossible for Citizens to submit a valid contention on this issue prior to April 4, 2006. Indeed, this lack of periodic monitoring was the basis of the initial contention and it was the April 4, 2006 commitment that the Board correctly found mooted the initial contention. R-83 at 10. While submissions regarding the April 4, 2006 commitments were pending, on June 6, 2008, AmerGen amended its UT monitoring program once more. R-99 at 2. Thus, all of these issues raised in the new contention regarding the new monitoring regime were timely.

As a matter of practicality, contentions submitted after the initial deadline are often based in part upon new information and in part upon information that was known at the time of the initial deadline. For example here, the Board noted that the monitoring regime for the period of extended operation incorporated elements of the prior monitoring regime that Exelon had used, but had not initially proposed to continue. *E.g.* R-99 at 12. However, the danger is that such contentions could be regarded as premature or lacking in basis at the outset, but be considered too late after the hearing has commenced, effectively depriving petitioners of an opportunity to obtain a hearing on the subject of the proposed new contention. If the agency does not admit such contentions during the proceeding, the agency would be echoing the cry of the White Queen in Alice in Wonderland: "the rule is,

jam tomorrow and jam yesterday - but never jam today." This inherently contradictory approach violates the mandate of the AEA that petitioners must be provided an opportunity to obtain a hearing on all material issues. Nonetheless, this reasoning was used on multiple other occasions to exclude new contentions during the Oyster Creek license renewal proceeding. As a shorthand, this brief refers to this fallacious reasoning as the "White Queen Fallacy."

The Board and Commission clearly used the White Queen Fallacy to conclude that Petitioners did not raise timely challenges to the acceptance criteria and the spatial scope of the new thickness monitoring regime. With regard to the spatial scope of the monitoring, in December of 2005, the applicant committed to make one more set of UT measurements from the interior of the drywell prior to the extended period of operation. R-36 at 31-32; R-99 at 3-4. However, the Board erred when it found that the appropriate time to challenge the spatial scope of the UT testing was promptly after AmerGen had docketed its December 2005 commitment to take one more round of measurements from the interior before the end of the licensed period of operation. R-99 at 29-30. Most obviously, this finding is flatly contradicted by a later ruling of the Board that stated Citizens could not challenge UT monitoring that occurs prior to any period of extended operation. Board Memorandum and Order dated July 11, 2007, R-197 at 2.

Furthermore, even the NRC Staff, who were generally adverse to Citizens regarded this element of the contention as timely. R-99 at 28-30. On appeal the Commission confirmed that a challenge made after the December 2005 commitment would not have been timely, but did not identify any time at which Citizens could have made a timely filing regarding the spatial scope and other rejected elements. Final Decision, R-581 at 50.

Similarly, the Board and Commission stated that Citizens were too late in challenging the acceptance criteria because they should have made this challenge at the time of the initial petition. R-99 at 12-14; Final Decision, R-581 at 49. At that time, however, such a challenge to a non-existent measurement program would have been entirely speculative and could not have met the strict contention admission requirements.

The inescapable conclusion is that there was no time at which Citizens could have made a timely challenge to the acceptance criteria or the spatial scope of the measurements, because the Board and Commission would have repeated the White Queen Fallacy on every occasion. Had Petitioners moved to admit a contention regarding the inadequacy of the UT monitoring program prior to April 4, 2006, it would have been too early because no UT measurements were to be taken after license renewal. However, apart from the sub-issue of frequency, which

Petitioners raised at the outset, when Petitioners moved to admit such a contention after the UT program came into existence, it was too late.

Notably, neither the Commission nor the Board found any other fault with the elements of the new contentions regarding spatial scope and acceptance criteria apart from timeliness. R-99 at 10-14, 28-30; R-581 at 49-50. Because there was no time at which the agency would have regarded these challenges to the monitoring regime as timely, Citizens had no opportunity to obtain a hearing on these issues. This is a straightforward violation of Citizens' hearing rights under the AEA and warrants reversal

B. The NRC Unlawfully Denied Valid Contentions Regarding Programs to Monitor Corrosion of the Embedded Region and the Interior of the Drywell

When additional information arose showing that Exelon had determined that water was present on the interior of the drywell leading to a danger of corrosion occurring from the interior in areas where it could not be seen, Exelon added exterior measurements of thickness in these areas to its previously proposed monitoring regime, which involved only internal measurements. R-125 at 3-5; R-112, Enclosure at 1-3, 52-53. In addition, for the first time, Exelon decided to monitor a small portion of the region of the drywell below the sandbed that has concrete on both sides (the embedded region). R-125 at 4-5.

Shortly thereafter, Petitioners proposed two new contentions: one alleging that the scope of the exterior measurements was insufficient to reliably detect interior corrosion and another alleging that more monitoring was needed in the embedded region. R-125 at 5. The Board found that both of these contentions were untimely by creating a novel and arbitrary policy that enhancements to existing programs cannot constitute new information upon which new contentions can be based. LBP-06-22, R-99 at 23. It then applied this newly minted policy to reject this contention as untimely. Board Memorandum and Order dated February 9, 2007, R-125 at 8, 16. The Commission endorsed this test on policy grounds and therefore declined to review the Board's decision in this regard. Final Decision, R-581 at 51-52.

Excluding these contentions by creating an entirely new hurdle not contained in text of the regulations is contrary to this Court's holding in *Beazer East*. 963 F.2d at 603. Furthermore, even the reasoning underlying the new policy is faulty. The Board and Commission illegally reasoned that allowing petitioners to base contentions upon enhancements to existing programs would discourage applicants from making such enhancements. LBP-06-22, R-99 at 23; Final Decision, R-581 at 51-52. In fact, policy considerations support the opposite finding. Enhancements to existing aging management programs are only needed

when applicants submit inadequate renewal applications, as Exelon did here.

Applicants propose enhancements when such deficiencies come to light. Allowing Citizens to base contentions upon such deficiencies would encourage applicants to submit complete applications and would enable hearings to focus on areas of the application which prove troublesome during the safety review. These are desirable goals recognized by Congress and the Commission.

As discussed above, the Board has repeatedly held that the text of the regulations allows new contentions to be added after the initial deadline has expired, provided they are based upon materially different new information. 10 C.F.R. § 2.309(f)(2). Had the agency actually applied this test, it would have found that the same new information about the discovery of water on the interior of the drywell prompted both Exelon's enhancements and Petitioners' contentions.

Because that information was sufficient to trigger Exelon to enhance its aging management programs, it was clearly new and material. Thus, the contentions were timely in accordance with the regulations. Furthermore, the decisions of the Board and the Commission to exclude the contentions were inconsistent with prior agency decisions, contrary to *Izaac Walton League*. 423 U.S. at 14-15.

Moreover, the approach taken by the agency to exclude these contentions also violates the AEA's statutory hearing right because Citizens would have always

been subject to the White Queen Fallacy at whatever time they proffered these contentions. Had they proffered these contentions at the outset based upon the mere possibility of water being present on the inside of the drywell before the water was found, they would have been too early,²⁸ but when they submitted the contentions shortly after the water was discovered, they were found to be too late. Finally, the UT monitoring program for the embedded region was completely *new*. The applied policy regard *existing* programs was therefore wholly irrelevant, and so the exclusion of that contention about the embedded region on these grounds was arbitrary for yet another reason.

The Board also rejected the contentions triggered by the discovery of water on the grounds that they failed to raise a material dispute. R-125 at 10-15, 16-19. However, to make these findings the Board looked into the disputed facts regarding the contentions and determined whether it thought they would make a material difference to the outcome of the licensing. *Id.* at 11-15; 16-18. This approach, which requires adjudicating disputes raised by the pleadings, is not permitted at the contention admission stage. *Sierra Club*, 862 F.2d at 228. Instead, to avoid making factual errors that cannot be corrected by subsequent proceedings, the Board should have applied the motion to dismiss standard and construed the facts

²⁸ See R-581 at 56 (merely showing interior corrosion could occur is insufficient to establish a basis for a contention)

in favor of Petitioners.

The Commission later upheld the Board's decision regarding these contentions, but in doing so revealed a fundamental lack of understanding in at least one area. R-581 at 55-56. With regard to the contention about the scope of the exterior measurements the Commission found that Petitioners had failed to present evidence that interior corrosion had actually occurred at Oyster Creek, but they had merely shown that it could occur. R-581 at 56. This contradicts the Board's correct findings that Petitioners showed that such corrosion had occurred at other plants, that measurements at Oyster Creek showed some loss of wall thickness, and that surface rust on the interior of the Oyster Creek containment had been observed. R-125 at 4, 17. Thus, the Commission's finding in this regard was contrary to the record.

Finally, the Commission's reasoning places petitioners in a Catch-22.

Requiring petitioners to prove that a condition, such as interior corrosion, exists even before there is a program in place to check for the existence of that condition is inherently contradictory. Petitioners would need to show that monitoring has found that the postulated condition exists before they could contend that such monitoring should be done. This requirement would therefore make it logically impossible to submit valid contentions about the need for monitoring to check for

potential problems that have neither been shown to exist nor been shown to be non-existent. This is clearly inappropriate in the context of the licensing standard which requires applicants to show that they have all potential aging issues under control. 10 C.F.R. § 54.21(a). Moreover, here, where Exelon actually made enhancements to its aging management programs based on the potential for further interior corrosion, the Commission should not have required further proof of such potential from the petitioners.

C. The NRC Unlawfully Denied a Valid Contention Regarding Metal Fatigue Issues

On April 3, 2008, after the hearing record had closed, the NRC Staff notified the Commission that it had decided to seek further confirmatory calculations of metal fatigue in the recirculation nozzles from Exelon because of deficiencies in the original calculations. Board Memorandum and Order, LBP-08-12 (July 24, 2008), R517 slip op. at 2. Soon thereafter, NRC's spokesperson stated that if a recirculation nozzle breaks, "it could lead to a severe accident, it would be a challenging situation for the control room operators." Todd Bates, *NRC Want Nuclear Plant's Water Nozzles Rechecked*, Asbury Park Press, April 7, 2008 (R-595). NRC's spokesperson continued by stating that the nozzle is "one of those components that needs to be carefully monitored." *Id.* Thereafter, on May 1, 2008, Exelon notified the Commission by letter that it had carried out the

confirmatory calculations and provided a brief summary of the results. *Id.* at 5.

Within 30 days of the NRC Staff notification, Citizens petitioned to add a contention concerning the safety of the recirculation nozzles at Oyster Creek. LBP-08-12, R-517 at 2-4. The proposed contention was that the predictions of metal fatigue for the recirculation nozzles at Oyster Creek are not conservative, and that therefore, they needed to be amended. *Id.* at 4. In support of this contention, Petitioners cited to the admission of NRC's spokesperson regarding the safety significance and presented affidavits that showed that the original calculation included a number of non-conservative assumptions and used a nonconservative, simplified methodology. Petitioners also presented affidavits stating that Exelon had failed to show that the confirmatory metal fatigue calculation was fully conservative. In addition, Citizens alleged that this lack of conservatism would likely lead to a violation of NRC regulations regarding Time Limited Aging Analysis ("TLAA") and was safety significant both for Oyster Creek and the seven other reactors at which the simplified method of calculating fatigue was used.

Despite a vigorous dissent by Judge Baratta, one of the two technical judges on the Board panel, two members of the panel denied the contention based on Citizens alleged failure to raise a significant safety issue, R-517 at 11-15, Citizens alleged failure to establish that a materially different outcome would be likely, *id*.

at 18-22, and that the additional information submitted by Exelon rendered the proposed contention moot. *Id.* at 15.

In stark contrast, Judge Baratta concluded that:

Citizens have shown they have met the standards for reopening, in a timely motion addressing a serious safety issue. To deny Citizens' motion and eliminate their access to the only means that will allow them to confront what appears to be a significant safety issue would be a grave error.

R-517, Dissent of Judge Baratta at 17. Contradicting the majority issue by issue he finds that "the conclusion that fatigue cracking of the recirculation nozzle is not a safety significant event is a grave error." *Id.* at 10. He further warns that dismissing the issue as insignificant "is not consistent with NRC policy" *Id.* at 11. He then states that "new information proffered by Citizens' evidence . . . would likely lead to a different outcome in the proceeding had it been considered previously." *Id.* at 14. On appeal the Commission did not mention mootness, but affirmed the two other bases of the Board's Decision. Metal Fatigue Decision, R-546. Thus, in the final analysis, the Commission affirmed the exclusion of the metal fatigue contention because the Commission did not believe the contention met the standard provided by the rules to allow reopening of the record.

1. The Rules Regarding Reopening Of The Record Were Not Applicable To The Metal Fatigue Contention

Courts have found that the Commission cannot apply the standards for reopening the record to a new contention that raises a new material issue, as opposed to new evidence about an issue that has already been heard. Specifically, in UCS I, the D.C. Circuit noted the inadequacy of the opportunity to request reopening as a substitute for the opportunity to request a hearing required by Section 189(a). 735 F.2d at 1443-44 & n. 11. The D.C. Circuit subsequently confirmed that the Commission cannot apply the standards for reopening the record to a new contention that raises a new material issue, as opposed to new evidence about an issue that has already been heard. Commonwealth of Mass. v. NRC, 924 F.2d 311, 334 (D.C. Cir. 1991). This is because Citizens have a statutory right to a hearing on all material issues under Section 189(a), which the NRC's desire for speed and efficiency may not unreasonably curtail. *Id.* Although reasonable restrictions on timeliness may be applied, id., the stringency of the reopening standards mean that they cannot be applied to new material contentions that deal with unlitigated issues. *Deukmajian v. NRC*, 751 F.2d 1287, 1316-17 (D.C. Cir. 1984), vacated in part, 760 F.2d 1320 (D.C. Cir. 1985) (en banc), and aff'd 789 F.2d 26 (D.C. Cir. 1985) (en banc), cert. denied, 479 U.S. 923 (1986). In reaching these holdings, the court was no doubt mindful that where an issue had

not been raised at all before the hearing record closed, Petitioners would only have access to very limited information.

Although these cases were decided before the Commission adopted the new Part 2 rules, the earlier decisions by the Commission that the D.C. Circuit reviewed were decided by the NRC using precisely the same standards as are contained in the rules. *Id.* at 1318. Thus, contentions about material issues that have not been litigated that are based upon new information that emerges after the hearing record has closed are not subject to the reopening standards, although they are subject to the normal rules on contention admissibility.

Contrary to this longstanding case law, the agency applied the reopening standards to exclude the metal fatigue contention, even though the fatigue issue was entirely new and Petitioners had no prior opportunity to request a hearing on the issue raised by the proposed contention. R-517, Dissent of Judge Baratta at 3-5. In addition, the fatigue issue must be material because it was the subject of an admitted contention during the Vermont Yankee license renewal proceeding, and it was the subject of a Commission notification by the staff.

Echoing the holdings of the court regarding the reopening standard, Judge Baratta noted that the majority's approach makes it "virtually impossible to ever reopen a proceeding no matter how safety significant an issue raised in a

contention might be and turns 10 C.F.R. § 2.326 into an academic exercise." *Id.* at 13. In addition, Judge Baratta warns that "to deny Citizens' motion and eliminate their access to the only means that will allow them to confront what appears to be a significant safety issue would be a grave error." *Id.* at 17.

On appeal, Citizens argued to no avail that that their statutory rights were being denied. R-546 at 15. Instead, the Commission affirmed the Board majority by applying the stringent requirements for reopening and disallowing any discovery. R-546 at 12-25. This approach is directly contrary to AEA and the case law in this area. Indeed, in *Deukmajian* the D.C. Circuit stated that if the Commission repeated its mistake of applying reopening standards to contentions about new issues that court "would have no choice but to presume bad faith on the part of the Commission and act accordingly." 751 F.2d at 1317.

Moreover, the Commission has found that licensing proceedings are governed by a "cardinal rule of fairness." *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-565, 10 N.R.C. 521, 524 (1979). Showing how unfair it would be to apply the reopening standards to contentions that raise new issues, here Petitioners were severely limited in the factual support they could provide, because Exelon refused to provide the underlying analyses to Citizens, *Id.* at 12, and the majority refused to allow any discovery at all. LBP-08-

12 (July 24, 2008) slip op. at 25 n. 23 (R-517). Even when Citizens sought to remedy this problem by making a FOIA request for the analyses of metal fatigue at issue, Citizens were stymied because the NRC Staff reviewed the analyses at Exelon's D.C. headquarters, in an apparent attempt to ensure that Citizens could not obtain them through FOIA. R-613.

Ultimately, despite there being no means for Citizens to obtain the detailed analyses, the majority found that Citizens had to provide more support to meet the requirements for motions to reopen. LBP-08-12, R-517 at 11-15. Thus, the Board created yet another procedural Catch-22 for Petitioners. According to the majority they did not have sufficient information available to meet the reopening standard, but without reopening, they could not obtain more information. Furthermore allowing petitioners' hearing rights to be curtailed merely because new information comes to light after the record has closed would violate the fairness requirement where, as here, petitioners had no control over when such events happen.

2. Citizens Met the Requirements for Reopening

Even if this Court declines to follow the holdings of the D.C. Circuit and decides that the reopening standard is applicable to the metal fatigue contention, it should still find that Petitioners met that test. First, the Commission recognized that the Board had essentially adjudicated the contention by making fact-based

Unfortunately, the Commission then itself prematurely adjudicated the issue of whether the applicable engineering code allows Exelon to make a less conservative assumption than it initially made, without any analyses of the prior condition of these particular nozzles at this particular plant. R-546 at 18. This issue was actually one of the material disputes between the parties that needed to be resolved during an administrative proceeding regarding the metal fatigue contention. Its premature adjudication was contrary to the requirement that the Board and the Commission may not adjudicate material disputes at the contention admission stage to "ensure that the parties are not required to prove their contentions before they are admitted in the proceedings." *Sierra Club*, 862 F.2d at 228.

Second, contrary to longstanding agency precedent, the Commission impermissibly relied upon an affidavit from the NRC Staff that stated that a violation of the standards for metal fatigue would not be safety significant. R-546 at 20. This was erroneous because it has long been established that in NRC administrative proceedings it is impermissible to argue that a breach of safety standards would not be safety significant. *See In the Matter of Vermont Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 528 (1973) (NRC Staff argued against motion to reopen by stating that even

though there was no showing of compliance with safety requirement, probability of an accident was low, leading to low safety significance. The Appeals Board characterized the Staff position as a collateral attack on the CLB, disregarded the Staff's testimony and granted the motion to reopen)

Third, the Commission improperly disregarded the admission of the NRC spokesperson that the issue was safety significant, suggesting that there was some kind of evidentiary deficiency. R-546 at 19. This reasoning is erroneous for two reasons. First, admissions are within the exceptions for hearsay and so are admissible evidence. Second, here the admission was offered prior to the commencement of any evidentiary proceedings in which hearsay standards are generally loosely applied. In addition, the Commission erroneously dismissed sworn statements by the very expert who had proved correct in his identification of deficiencies in fatigue calculations during the Vermont Yankee proceeding as "speculation." *Id.*

Moreover, the Commission and the majority of the Board not only failed to consider the specific safety significance of the metal fatigue issue, they also failed to consider the broader safety significance of the issue. *E.g.* R-546 at 19 n. 4. The non-conservative simplified calculations had also been used at seven other plants. Entergy Nuclear, Presentation Slides at NRC Public Meeting on January 8, 2008 at

20, R-592. Staff's failure to spot this issue at eight reactors until after it was raised by Dr. Hopenfeld as the expert for the intervenors in the Vermont Yankee proceeding raises safety concerns. *See* NRC Regulatory Issue Summary 2008-10, Fatigue Analysis of Nuclear Power Plant Components, dated April 11, 2008, R-593 (advising licensees that the NRC Staff is considering further action for plants with renewed licenses where the simplified analysis was used). Thus, this metal fatigue issue is not only a significant safety concern at Oyster Creek, it is also relevant to safety at seven other reactors.

- II. The Commission Illegally Referred Unresolved Issues To The Staff and Disregarded Problems With the Staff's Safety Review
 - A. The Commission Must Make a Definitive Finding Of Safety Based Upon a Sound Record Directly, or Through The Staff, and Must Require The Applicant to Provide Sufficient Information to Enable Definitive Findings to Be Made

The Supreme Court has found that the AEA requires the agency administering nuclear safety to make a definitive finding of safety regarding the operation of a reactor prior to licensing its operation. *Power Reactor Development Corp. v. International Union of Electrical, Radio, and Machine Workers*, 367 U.S. 396, 409-10 (1961). The *Power Reactor* court also endorsed the requirement of the NRC regulations to find "reasonable assurance that the health and safety of the public will not be endangered" by the operation of a nuclear power facility, and

characterized this reasonable assurance standard as equivalent to the "definitive finding of safety of operation" that is required by the statute. *Id.* at 407.

More recently courts have confirmed that the AEA requires the agency to make a "definitive finding of safety of operation" before it licenses the operation of a nuclear power facility. *Union of Concerned Scientists v. NRC*, 824 F.2d 108, 116 (D.C. Cir. 1987). This "definitive finding" must encompass all issues material to licensing. *Union of Concerned Scientists v. NRC*, 735 F.2d 1437, 1438-50 (D.C. Cir. 1984). Consistent with *Power Reactor* and its progeny, the Commission has interpreted its own regulations to mean that "the NRC may not issue a license until all appropriate safety findings have been made." *Commonwealth Edison Co.* (*Byron Nuclear Power Station Units 1 & 2*), 15 NRC 1400, 1420 n.36 (1982); *In re S. Carolina Electric and Gas Company*, 13 NRC 881, 895 (1981).

The relicensing process initially places the burden on the applicant to "demonstrate how their aging management programs will be effective in managing the effects of aging during the period of extended operation." *Florida Power and Light Co.*, 54 NRC 4, 8 (2001); 10 C.F.R. § 54.21(a). Based upon the submissions of the applicant, the Commission must then find that there is reasonable assurance of compliance with the safety requirements during the period of extended operation before it can issue a renewed license. 10 C.F.R. § 54.29.

The Staff's role during license renewal is critical. Both the scope and the adequacy of a license renewal applicant's program for managing aging passive components are subject to the NRC Staff's review. NRC Inspection Manual, Inspection Procedure 71002 at 1-2 (February 18, 2005), R-586. The NRC's Inspection Manual confirms that the Staff is responsible for verifying that the license renewal applicant has documented and covered all relevant systems, structures and components ("SSCs") in its license renewal program; and that the applicant's aging management program is adequate. *Id.* at 2-3. In addition, the NRC Staff must "ensure that operating experience relevant to a specific system, structure, or component was properly considered in the nature and extent of the potential aging effects." NRR Office Letter No. 805, Attachment 1 (Guide for License Renewal Application Review Process), Attachment B (Safety Evaluation Form and Content Template) at 2 (June 19, 1998), R-587.

NRC guidance also requires the NRC Staff to document its safety review. Each safety evaluation report "should provide sufficient information to explain the staff's rationale to someone unfamiliar with the licensee's request" for renewal of the license. *Id.* at 9. Finally, in NRC licensing proceedings, the Commission generally defers to the Staff's conclusions on safety issues, unless they are contested. *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site),

CLI-05-17, 62 NRC 5, 35 (2005). The Staff's findings on the adequacy of a license renewal application therefore normally form the basis for the NRC's decision whether to allow the facility to operate twenty years beyond its original license term.

In construction license proceedings, the Board initially ensures that the findings of the NRC Staff meet the statutory requirements irrespective of whether any members of the public intervene. 42 U.S.C. § 2239(a). As the Clinton ESP decision confirmed, in the mandatory hearing, during the review of the Staff's work, the licensing board must not only ensure that the Staff has made the required definitive findings of safety, it must also determine "whether the application and the record contain sufficient information and the review of the application by the Commission's staff has been adequate to support" those findings. Notice of Hearing and Opportunity To Petition for Leave To Intervene Early Site Permit for the Clinton ESP Site, 68 Fed. Reg. 69,426, 69,427 (Dec. 12, 2003); see also Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39 (2005); Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), LBP-06-28, 64 NRC 460 (2006). In carrying out this review, Boards have found much fault with the Staff's work and have required many improvements. For example, the Clinton ESP case, the Board found "many

instances" in which "the technical portions of the Staff documents in the record (particularly the SER [safety evaluation report] and to some degree, the EIS [environmental impact statement]) did not support a finding that the Staff's review supported its decisions." LBP-06-28, 64 NRC at 474-75.

As a result of these issues, the ASLB found nearly ninety safety matters that required further explanation, sixty that required inquiry beyond the first set of questions, and a number that required resolution at an oral hearing. *Id.* at 479. In the end, the ASLB found that issuance of the Clinton ESP would not be inimical to common defense and security or to the health and safety of the public. *Id.* at 497-98. However, the decision makes clear that to make that finding the ASLB had to prompt the Staff in many areas to provide logical explanations that it could rely upon.

Similarly, in two other ESP decisions, the Board found many issues that needed clarification and follow-up after the NRC Staff's review was complete. For example, in the North Anna ESP proceeding, the ASLB issued a "wave of safety questions" initially and finally concluded that seven topics needed to be addressed by oral testimony. *Dominion Nuclear North Anna, L.L.C.* (Early Site Permit for North Anna ESP Site), LBP-07-09, 65 N.R.C. 539, 563 (2007). The Board found that after the NRC Staff review, "six fundamental questions" remained for which

insufficient information was available prior to the ASLB proceeding. *Id.* at 629. Only after taking account of all of the record evidence, including that added by the ASLB proceeding, did the Board find the record was sufficient to support a "not inimical" finding. *Id.* at 599, 629. Likewise, in the Grand Gulf ESP proceeding the ASLB found that in several instances, it was necessary for the ASLB to "amplify, modify, or change statements" in the SER." *System Energy Resources* (Early Site Permit for Grand Gulf ESP Site), LBP-07-01, 65 N.R.C. 27, 102 (2007). The Board, therefore, deferred a number of issues to later stages, *Id.* at 102-03.

In relicensing proceedings, where the Commission has decided to forgo the benefit of having the Board carry out a review of the Staff's actions and has also prevented Petitioners from raising contentions about Staff performance, the Commission is therefore obliged to enforce the reasonable assurance standard itself by not only reviewing the contested contentions, but also by ensuring that the review of the application by the Staff is adequate to support the Staff's definitive findings of safety on the uncontested issues. The Commission has indeed recognized in this proceeding that it must ensure that the Staff is performing the agency's statutory duties. Final Decision at 28 n.121, 67, 85 (R-581). However, contrary to its own prior interpretations of the AEA, at Oyster Creek the

Commission failed to make its own definitive finding of safety for a number of the contested issues, and failed to ensure that the Staff had reached definitive findings of safety based upon an adequate review of the application for the uncontested issues. In many cases the Commission's failure to make a definitive finding of safety on contested issues can be traced directly to failures of the applicant to meet its burden to establish that aging issues are being managed properly, and subsequent failures of the agency to enforce this requirement.

- B. The Commission Failed To Take Required Actions Regarding Many Issues Contested at the Hearing
 - 1. With Regard to the Structural Safety of the Drywell the Commission Failed to Take Required Actions

The Commission itself failed to make the required definitive finding of safety by conditioning its finding of reasonable assurance of safety upon subsequent attention by Staff to issues concerning the structural strength of the drywell shell. R-581 at 35-36; 65-68. Specifically, the Commission made a conditional finding stating that "Subject to the considerations we discuss below . . . [in Section D, *infra*], we agree with the Board's finding that the ultrasonic testing program provides reasonable assurance that the drywell liner will not violate that acceptance criteria during the period of extended operation." R-581 at 35-36. Section D, is a lengthy discussion of license condition 7 that was originally

designed to ensure that further analysis of the drywell shell was done prior to the period of extended operation to ensure it was safe. *Id.* at 65-68. In addition, tacitly recognizing that the Staff's review of the compliance with condition 7 had been lacking, the Commission instructed the Staff to "enhance its review of Exelon's compliance with license condition 7, using its expertise and judgment, suitably informed by the recommendations of the ASLB." *Id.* at 67-68. Notably, the Commission did not require the Staff's review of compliance with condition 7 to be complete prior to the issuance of the license.

Petitioners do not now contest the legality of the Commission's chosen approach to resolving the drywell structural issue at this stage because the Staff review of these issues is now complete and did not reveal any major new issues with regard to the structural integrity of the containment system. The net result is that this proceeding has prompted the Commission to closely supervise the Staff with regard to this issue. It would of course have been far preferable had the Commission heeded the Supreme Court and made a definitive finding of safety on this issue at the time of licensing. The Commission's haste to make a decision in this case may be explained by the fact that the initial license was about to expire. Thus, although the timing of Staff review violated the AEA, Petitioners are concentrating their request for relief on areas that have yet to be resolved.

Furthermore, the Commission's approach to this issue clearly showed it failed to ensure that the licensee provided sufficient information prior to licensing to allow the Commission to make a definitive finding of safety, as is required by the AEA and the Commission's own rules. 10 C.F.R. § 52.21(a)²⁹.

2. With Regard to the Drywell Aging Management the Commission Failed to Take Required Actions

With respect to the drywell monitoring frequency issue, the Commissioners explicitly recognized that the agency review of the issue suffered from a number of deficiencies, but did not resolve those deficiencies. These deficiencies came into sharp relief because, while the appeal was pending, Exelon discovered more corrosion of the drywell, degradation of the protective coating, and a failure of its system to detect water in the sand-bed region. These issues are related by the NRC Staff in inspection report No. 05000219/2008007 (the "Inspection Report"), dated January 21, 2009 (R-606).

The information in the Inspection Report contradicted three critical findings made by the Board in its Initial Decision in this proceeding and therefore undermined the Board's ultimate finding that the aging management program ("AMP") for the drywell shell to which Exelon has committed would provide ²⁹For example, the applicant actually stated it was unable to determine the margin of safety above one of the acceptance criteria. AmerGen Ex. B Part 3 at A29, R-338.

reasonable assurance of adequate protection during any extended period of operation. As the current Chair of the Commission wrote in dissent, the Inspection Report "provides evidence that directly contradicts evidence the Board relied upon in ruling against Citizens on its contention in this proceeding." Final Decision, Dissent of Commissioner Jaczko Dissent at 1 (R-581). He concluded that the post-hearing events showed that much of the testimony upon which the Board relied was "optimistic, at best." R-581, Jaczko Dissent at 7; *See also* Citizens' Motion to Reopen, dated Feb 2, 2009, R-559 at 2-7.

More specifically, water was able to enter the sandbed area because the measures to prevent this "were not as foolproof as the Board was led to believe" by Exelon's experts. R-581, Jaczko Dissent at 2-3. Furthermore, Exlon's failure to find water in bottles attached to drains coming from the sandbed, when inspectors actually found water in the sandbed region, shows that the ability of this system to detect water is questionable, further undermining testimony the Board accepted. *Id.* at 4-5. Finally, the coating designed to protect the drywell was damaged and not as pristine as the Board was led to believe. *Id.* at 5-6. Based upon Exelon's failure to effectively implement its commitments in the 2008 refueling outage, Commissioner Jaczko would have required additional monitoring. *Id.* at 1. Even the majority acknowledged that "we do agree with Commissioner Jaczko to the

extent he suggests that had the inspection results been available at the time of the hearing, some parts of the expert testimony before the Board might have addressed the problems uncovered during the 2008 refueling outage — and some details of the Board's analysis might have been modified." R-581 at 82.

After an extensive discussion of the issues raised by the Inspection Report, the majority eventually concluded that the problems with the testimony of Exelon and the Staff were of no import, because the Commission had "no demonstration of a significant safety problem requiring a more extensive oversight program than already exists in the license renewal commitments and conditions." *Id.* at 84. The majority then cautioned "we expect nothing less than the Staff's rigorous review of the unresolved items in future inspections, and if the findings are not satisfactory, we fully expect Staff to follow up with necessary measures, which could include amended license conditions or enforcement action." *Id.* at 84.

These statements of the majority illustrate three critical issues. First, they shows that instead of requiring the licensee to demonstrate that all safety issues had been dealt with, as is required by 10 C.F.R. §54.21(a), the majority actually applied the opposite standard and required intervenors to show a safety problem. Second, they show that there were unresolved issues before the Commission at the time it made it licensing decision, because the Commission knew that the ways in which

the Board and the Staff had reached their findings was flawed. Third, they show that instead of making a definitive safety finding in this regard, the majority relied upon the Staff to develop more information post-licensing to determine if additional license conditions were required to assure safety during the period of extended operation.

As an example of one the material safety issues that the majority failed to address, the Commission failed to require the Staff or the applicant to improve water detection systems in the drywell, even though Commissioner Jaczko stated that the effectiveness of the current Heath-Robinson system involving 50 ft plastic tubes draining into bottles is "questionable" and the system actually failed to work. R-581, Jaczko Dissent at 4-5. Illustrating that this issue is material to licensing. prior to the events in the Inspection Report, the Staff closed an open safety issue based upon a finding that Exelon's commitment to monitor bottles connected to the drains from the sandbed region would "provide reasonable assurance that any further incidents of water in the sandbed region will be systematically evaluated." R-590 at 4-69 (emphasis added). However, the Report showed, and Commissioner Jaczko recognized, that water can be present in the sandbed region, but not be observed in the bottles connected to the drains. Inspection Report at 6-7. Furthermore, Chairman Jaczko would have required additional monitoring based

upon the problems revealed by post-monitoring events. Thus, even though the post hearing events showed that the Commission could not rely upon the Staff's finding of reasonable assurance of safety with respect to this issue, the majority of Commission both took no action to resolve this problem prior to making the licensing decision. Instead, in the Final Decision the Commission referred these issues to the Staff. R-581 at 28 n. 121. This referral violated the AEA requirement for a definitive finding on all material issues, violated the the Commission's duty to ensure that the Staff's findings of safety were adequate prior to licensing, and show that the the applicant had failed to show that it had aging of the drywell under control prior to licensing, contrary to the Commission's regulations.

C. The Commission Arbitrarily Failed to Resolve Other Problems With The Staff's Safety Review

In addition to raising issues concerning the aging management of the drywell, Petitioners, in conjunction with other public interest groups, and supported by New York State and Connecticut, submitted a Petition regarding the OIG Report. OIG Petition, R-453. The fact section of this brief describes these shortcomings in detail. In addition, the OIG Petition showed that Board reviews of the NRC Staff's safety reviews during ESP had found them to be severely deficient and that Exelon had admitted that the system to track regulatory commitments at

Oyster Creek was ineffective. Id. 30

In response to the OIG Report, the NRC Staff instituted improvements for license renewal reviews that had not been completed, but did nothing to correct reviews that had already been completed and found deficient. Supervision Decision, R-540 at 32-33. As discussed above, the Commission has a duty to ensure that the Staff's findings of safety regarding licensing are adequate. Contrary to that duty, here Commission failed to take any action in this regard, even though the OIG Report and anecdotal information from the Oyster Creek and Vermont Yankee proceedings, showed that the quality of reporting and factual verification at the license renewal stage is no better than it was for the ESP cases. *Id.* at 18-25; 32-33. Like the Board in the ESP cases, the Commission should have resolved the identified issues. However, instead, the majority once again erroneously placed the burden to show a safety problem upon Petitioners. *Id.* at 32.

In contrast, the current Chair, then Commissioner Jaczko, recognized the importance of the Staff safety reviews and recognized that they must establish a "complete and sound basis for the agency's ultimate license renewal decisions." *Id.* at 34. He would therefore have ordered the Staff to ensure its reviews followed the required guidance and check "whether its review reflected an exercise of

³⁰ This brief discusses the ESP findings in detail in the legal analysis at the start of this Section and the details regarding the lack of commitment tracking in the facts.

independent staff judgment." *Id.* He pointedly stated "I can find no justification or benefit to leaving a record begging these obvious questions." *Id.* at 35. Finally, he would also have checked whether the Staff's destruction of documents was wise or improper. *Id.* The majority failed to take even the rudimentary steps outlined by Chairman Jaczko. Because it failed in its supervisory duty to verify that the Staff's work was sound, its decision to approve the license for Oyster Creek violated the AEA and was arbitrary.

CONCLUSION

For the foregoing reasons, this Court should vacate the appealed decisions

and remand them back to the Commission for further consideration in accordance

with the guidance provided by this Court, or grant such alternative or additional

relief as this Court may see fit.

Respectfully Submitted,

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COMBINED CERTIFICATIONS

In accordance with the Fed. R. App. P. and the Local Rules, I hereby certify that:

- 1. I am a member in good standing of the bar of the United States Court of Appeals for the Third Circuit.
- 2. This Brief complies with Fed. R. App. P. 29(d) and 32(a)(7)(C) because the principal portions of the Brief contain 13,980 words according to the "Word Count" function of the Open Office software program, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).
- 3. This Brief complies with the type-face limitations of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because the brief has been prepared in proportionally spaced typeface using 14 point Times New Roman in Open Office.
- 4. This Brief complies with Third Circuit Rule 3 l.l(c) because text in the electronic copy of this Brief is identical to the text in the paper copies. The electronic copy of this Brief was scanned for viruses by Norton Anti-Virus and no viruses were detected.

5. I caused two copies of this brief to be served today by overnight mail, and a courtesy copy electronically, on the following counsel to the parties in this matter:

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