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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BEFORE THE COMMISSION

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OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

In the Matter of )  
AMERGEN ENERGY COMPANY, LLC ) Docket No. 50-0219-LR  
(License Renewal for the Oyster Creek )  
Nuclear Generating Station )  
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**CITIZENS' PETITION FOR REVIEW OF LBP-08-12**

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August 1, 2008

TEMPLATE = SECY037

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BEFORE THE COMMISSION

In the Matter of )  
AMERGEN ENERGY COMPANY, LLC ) Docket No. 50-0219-LR  
(License Renewal for the Oyster Creek ) August 4, 2008  
Nuclear Generating Station) )

**CITIZENS' PETITION FOR REVIEW OF LBP-08-12**

**I. INTRODUCTION**

Pursuant to 10 C.F.R. § 2.341 or in the alternative § 2.311,<sup>1</sup> Nuclear Information and Resource Service, Jersey Shore Nuclear Watch, Inc., Grandmothers, Mothers and More for Energy Safety, New Jersey Public Interest Research Group, New Jersey Sierra Club, and New Jersey Environmental Federation (collectively "Citizens") hereby petition the Nuclear Regulatory Commission ("NRC" or "Commission") for review of Atomic Safety and Licensing Board ("ASLB" or "Board") Memorandum and Order LBP-08-12.<sup>2</sup>

**II. BRIEF SUMMARY OF THE DECISION OF THE BOARD**

This appeal concerns the future safety of the recirculation nozzle at Oyster Creek Nuclear Generating Station ("Oyster Creek"). Decision at 2. The proposed contention is that the predictions of metal fatigue for the recirculation nozzles at Oyster Creek are not conservative, and that therefore, they must be amended. *Id.* at 4. This contention was prompted by the NRC

<sup>1</sup> Although Citizens believe that Section 2.341 applies to this appeal, out of an overabundance of caution, they have also met the requirements of Section 2.311.

<sup>2</sup> Memorandum and Order (Denying Citizens' Motion to Reopen the Record and to Add a New Contention), *In the Matter Of AmerGen Energy Co, LLC* (License Renewal for Oyster Creek Nuclear Generating Station), LBP-08-12 (July 24, 2008) (the "Decision")

Staff's decision on April 3, 2008 to notify the Commission that they had decided to seek further confirmatory calculations from AmerGen Energy Co, LLC ("AmerGen") because of deficiencies in the original calculations. *Id.* at 2. Thereafter, on May 1, 2008, AmerGen notified the Commission by letter that it had carried out the confirmatory calculations and provided a brief summary of the results. *Id.* at 5. In support of this contention, Citizens presented affidavits which showed that the original calculation included a number of non-conservative assumptions and used a non-conservative simplified methodology and that AmerGen had also 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 seven other reactors at which the simplified method of calculating fatigue was used. Despite a vigorous dissent by Judge Baratta, two members of the Atomic Safety and Licensing Board (the "Board") denied the contention based on Citizens alleged failure to raise a significant safety issue, Decision at 11-15, Citizens failure to establish that a materially different outcome would be likely, *id.* at 18-22, and that the additional information submitted by AmerGen rendered the proposed contention moot. *Id.* at 15.

In stark contrast, Judge Baratta, one of the two technical judges on the panel, concludes 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." Decision, 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. On this point he warns that dismissing the issue as

insignificant "is not consistent with NRC policy and in particular with the concept of defense-in-depth." *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.

### **III. ERRORS MADE IN THE DECISION**

#### **A. Identification of Issues Raised**

Issue C1: Whether the majority of the Board erred by misinterpreting the legal standard for determining whether the motion addressed a significant safety issue by suggesting that Citizens had to prove more than a potential violation of the Commission's regulations regarding safety and ignoring evidence that Citizens had properly raised a significant safety issue?

Issue C2: Whether the majority of the Board misapplied the summary judgment standard of proof applicable to motions to reopen by making factual findings regarding mootness and the likelihood of the contention materially affecting licensing that ignored conflicting evidence and were based solely on disputed assertions by AmerGen, whose foundation was unavailable to Citizens, and which did not persuade Judge Baratta, one of the two technical judges on the Board?

Issue C3: Whether the majority of the Board violated the cardinal rule of fairness by basing its decision on bare assertions by AmerGen, that Citizens had very limited opportunity to litigate, and failing to take account of which parties caused the need to the reopen the hearing?

Issue C4: Whether the majority of the Board violated the Atomic Energy Act and the requirements of due process by failing to provide any opportunity for Citizens to obtain a hearing on the metal fatigue issue?

## B. The Contention Addressed A Significant Safety Issue (Issue C1)

### 1. The Majority Applied The Wrong Legal Standard

The text of 10 C.F.R. § 2.326 merely requires motions to reopen to “address a significant safety issue.” 10 C.F.R. § 2.326(a)(2). It requires no specific showing that if unattended the issue would cause a major nuclear accident, as the majority appears to believe. *See Decision* at 15 n. 12. Instead, Citizens merely had to show that a possible violation of the safety standards required by the regulations could occur.<sup>3</sup> As Citizens pointed out in their reply to the NRC Staff’s briefing, it has long been established that it is impermissible to argue that a violation of Commission regulations is not safety significant. *Citizens Reply to NRC Staff* at 2-3, *citing In the Matter of Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 528 (1973). In that case, the NRC Staff argued against a motion to reopen by stating that even though there was no showing of compliance with a certain requirement, the probability of an accident as a result was low, leading to low safety significance. *Id.* at 529. Based on the principles stated, the appeals board disregarded this argument as “legally irrelevant” because it was an indirect attack on the regulations and decided that a motion to reopen the proceeding to consider the issue was properly granted. *Id* at 529-31.

Moreover, this approach is merely the logical corollary of the oft-cited rule that petitioners may not allege that the current licensing basis is inadequate. *E.g. id.* at 528; *Initial Decision, In the Matter Of AmerGen Energy Co, LLC* (License Renewal for Oyster Creek Nuclear Generating Station, LBP-07-17 (2007) (“Initial Decision”) at 14 n.17. Because the rules prevent petitioners from alleging that the requirements are not conservative enough, it would be fundamentally unfair to allow the licensee and the Staff to argue that the requirements are too

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<sup>3</sup> As discussed below, Citizens had to provide sufficient evidence of this to withstand summary judgment.

conservative and so may be violated without raising a significant safety issue. Such unfairness is prevented by the “cardinal rule of fairness.” *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-565, 10 N.R.C. 521, 524-25 (1979); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 N.R.C. 61, 83 n. 17 (1996); rev’d in part on other grounds, CLI-96-7, 43 NRC 235. Therefore, all parties must make compliance with Commission requirements the *sine qua non* to judge safety significance.

Citizens’ initial motion presented evidence that the existing TLAA was not conservative and that a conservative analysis would yield unacceptable results. Citizens Motion To Reopen at 9. Citizens first used the Staff Notification, dated April 3, 2008 *available at* ML08090335 (the “Notification”) and information from the Vermont Yankee relicensing proceeding to show that the analysis of the Cumulative Use Factor (“CUF”) was likely to be non-conservative because it used a simplified method. Decl. of Joram Hopenfield, dated April 15, 2008 (“Hopenfeld Decl.”) at ¶¶ 5-7. Because the predicted environmentally corrected Cumulative Use Factor (“ $CUF_{EN}$ ”) was at or close to the allowable limit, Citizens inferred that any increase would cause exceedance of the allowed limit of one during any extended period of operation. *Id.* at ¶ 9. Thus, because this would lead to violation of the requirement for an adequate TLAA, 10 C.F.R. § 54.21(c)(1)(ii), the increase would be safety significant. Citizens then reinforced the view that the original fatigue analysis for the recirculation nozzle was not conservative by using AmerGen’s summary of the revised analysis.<sup>4</sup> This showed that the first analysis of metal

<sup>4</sup> The majority appears to take the view that Citizens could not rely upon the submissions of the Staff or AmerGen to establish that the calculations performed to date are deficient. Decision at 11 n. 10. As Judge Baratta notes, this notion is contradicted by the case law. Decision, Dissent of Judge Baratta at 6-7. Moreover, this approach would lead to absurd consequences. The only information that is available to Citizens prior to the admission of a contention comes from the submissions of the Staff and AmerGen. As Judge Baratta states “to require more of an intervenor [than basing its motion on what is available in the public record] would make it virtually impossible to ever reopen a proceeding no matter how safety significant an issue raised in a contention might be.” *Id.* at 13.

fatigue was not conservative for two additional reasons. First, the revised analysis increased the environmental correction factor ("F<sub>EN</sub>"), showing that the original environmental correction factor was too low. Second Declaration of Dr. Joram Hopenfeld, dated May 23, 2008 ("Second Hopenfeld Decl.") at ¶ 6. Second, the revised analysis treated the transients differently leading to an increase in the CUF, showing that the original treatment was not conservative. Citizens Response to Board Order at 6.

Finally, Citizens showed that AmerGen has failed to demonstrate that the confirmatory analysis was conservative because AmerGen had included the nozzle cladding in the first analysis, but had omitted it in the second without providing any plant-specific justification. Second Hopenfeld Decl. at ¶¶ 9-11. Citizens' expert opined that without making such a change, the fatigue would likely have exceeded the allowable limit. *Id.* at 9. Thus, Citizens presented sufficient evidence to show that AmerGen has so far failed to demonstrate that it would comply with 10 C.F.R. § 54.21(c)(1)(ii). Contrary to the view of the majority, this alone should have been sufficient to show that the contention addressed a significant safety issue.

## 2. The Majority Ignored Evidence That The Issue Raised Was Safety Significant

Citizens provided sufficient evidence to show that the issue was safety significant even under the incorrect legal standard postulated by the majority. However, the majority of the Board overlooked the import of the evidence presented by Citizens because it failed to consider Citizens response to the Board's request for additional briefing in conjunction with the initial briefing. For example, the majority dismisses as irrelevant Citizens' showing that the NRC spokesperson admitted that breakage of the recirculation nozzle "could lead to a severe accident," Decision at 14, but then contradicts itself by stating that Dr. Hopenfeld should have explained "the events that might occur if the recirculation nozzle failed incrementally or

catastrophically.” Decision at 15 n. 12. Because the NRC spokesperson had already stated that a catastrophic failure could lead to a severe accident, such testimony was not required from Citizens’ expert. Furthermore, given the technical nature of two of the judges on the panel, it was unnecessary for Dr. Hopenfeld to spell out the obvious: that exceeding the allowed fatigue limit increases the likelihood of failure to a point deemed unacceptable by the Commission.

Even more surprisingly, the majority was also unable to find anything in Judge Baratta’s dissent that shows that Citizens raised a significant safety issue. *Id.* at 11 n. 10. Judge Baratta states “Citizens have presented a declaration of an expert, as well as citations in the petition, that clearly and reliably demonstrate the existence of a significant safety issue. Dissent of Judge Baratta at 7 n. 6. Judge Baratta also presents additional evidence that fatigue failure of the recirculation nozzle could lead to a loss of coolant accident and that the fatigue analysis regulatory requirement is designed to address this problem. *Id.* at 8-9. Judge Baratta also points out that one layer of defense-in-depth would be lost unless the CUF<sub>EN</sub> for the recirculation nozzle is properly understood. *Id.* at 10-11. Finally, Judge Baratta warns “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. Thus, even applying the wrong legal standard adopted by the majority, there was sufficient evidence to show that Citizens’ contention addressed a significant safety issue.

The majority also failed to consider the broader safety significance of the issue. Citizens Motion to Reopen at 8-9. The non-conservative simplified calculations have also been used at Dresden/Quad Cities, Nine Mile Point Unit 1, Ginna, Point Beach, Farley, Palisades, and Millstone 2/3. Entergy Nuclear, Presentation Slides at NRC Public Meeting on January 8, 2008 at 20 *available at* ML080100282. 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 Fourth Declaration of Dr. Joram Hopenfeld, dated July 10, 2007 at ¶¶ 18-24 *available at* ML072010437 (identifying a number of problems with the CUF analysis at Vermont Yankee); Seventh Declaration of Dr. Joram Hopenfeld, dated March 11, 2008 at ¶¶ 4-13 *available at* ML080850074 (CUF for feedwater nozzle at Vermont Yankee increased from 0.0636 to 0.0889 when using more complex calculation, which remains inadequate); NRC Regulatory Issue Summary 2008-10, Fatigue Analysis of Nuclear Power Plant Components, dated April 11, 2008 *available at* ML080950235 (advising licensees that the NRC Staff is considering further action for plants with renewed licenses where the simplified analysis was used). At the moment the effect of the change from the simplified calculation to the code-compliant calculation has been obscured by changes in assumptions. Hopenfeld Decl. at §§ 8-9. Thus, this metal fatigue issue is not only a significant safety concern at Oyster Creek, it is also relevant to safety at least seven other reactors.

The need to develop the record can itself serve as a trigger to reopen the record.

Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B and 2B), ALAB-463, 7 NRC 341, 352 (1978). Both the public and the Commission would benefit from further development of the record to more fully understand the significance of use of the simplified calculations not only at Oyster Creek, but also at the seven other plants where the simplified method has been relied upon to grant a license. Thus, the majority should have also considered the broader significance of the issue raised by the proposed contention, and found that it was safety significant.

**C. Admitting The Contention Would Likely Have A Material Effect On The Outcome (Issue C2)**

1. The Standard For Reopening Is Determined Using The Summary Disposition Standard

To reopen the record intervenors must show that admitting the proposed contention would be likely to have a material effect on the outcome. 10 C.F.R. § 2.326(a)(3). As the majority concede, a materially different result would include the imposition of a licensing condition. Decision at 26 n. 24. Intervenors must therefore show that there is some deficiency whose resolution would likely lead to the need for either a change in the aging management regime or a license condition. However, because the full facts are not available at the time Boards decide upon motions to reopen, Boards should use the summary disposition standard to determine whether the pre-requisite showing to reopen the record has been made. *In the Matter of Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005). Thus, a party seeking to introduce a new issue must back its claim with sufficient evidence to withstand summary disposition when measured against its opponents' contravening evidence. *Private Fuel Storage*, 61 NRC at 348, 350. Therefore, no reopening of the hearing is required if there is no genuine unresolved issue of fact, but reopening is required if the information presented is significant and plausible enough to require reasonable minds to enquire further. *Id.* at 350. For these purposes, the intervenor is considered to be the party opposing summary disposition. *Vermont Yankee Nuclear Power Corp.*, 6 AEC at 524.

Summary disposition is only possible "if the filings in the proceeding, depositions, answers to interrogatories and admissions on file, together with the statements of the parties and

the affidavits, if any, show that there is no genuine issue as to any material fact and the moving party is entitled to a decision as a matter of law.” 10 C.F.R. §§ 2.1205(c), 2.710(d)(2). Prior NRC opinion has held that summary disposition motions under 10 C.F.R. § 2.749 (the equivalent rule prior to the revision of 2004) should be evaluated under the same standards as motions made under Federal Rules of Civil Procedure, Rule 56. *Advanced Med. Sys., Inc*, CLI-93-22, 38 N.R.C. 98, 102 (1993).

Under this rule, the moving party bears the burden of proving the absence of a genuine issue of material fact. *Adickes v. Kress & Co.*, 398 U.S. 144, 157 (1970). Because the burden of proof is on the movant, the evidence submitted “must be viewed in the light most favorable to the opposing party [i.e. the intervenor].” *Id.* A genuine issue is one in which “the factual record, considered in its entirety, must be enough in doubt so that there is a reason to hold a hearing to resolve the issue.” *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), LBP-83-46, 18 N.R.C. 218, 223 (1983). Generally, under Rule 56, summary dispositions may not rest on credibility determinations. *Leonard v. Dixie Well Service and Supply, Inc.*, 828 F. 2d 291, 294 (5th Cir. 1987). Thus, conflicting opinions from experts generally preclude summary disposition.

The Commission should apply this summary judgment standard in way that ensures that technically meritorious contentions are admitted, even if it means admitting a few contentions that are easily dismissed. If the Board admits a contention based on limited knowledge that turns out to be moot or otherwise insubstantial, licensees have many remedies, including motions for mootness or summary disposition. In contrast, if the Boards refuses to reopen proceedings when an intervenor shows that despite ample opportunity, a licensee has failed to present well-founded

evidence establishing compliance with the regulations, many technically meritorious contentions would be dismissed, absent reversal by the Commission.

## 2. The Conservatism Of The Fatigue Analyses Is In Dispute

At minimum, there are unresolved issues of fact regarding whether a materially different result would be likely. Judge Baratta, one of the two technical judges on the panel, unequivocally decided that a materially different result was likely, because the analyses relied upon to date are not conservative. Citizens provided expert testimony stating that to be certain that an analysis was conservative, each assumption should be justified by the actual conditions. Decision, Dissent of Judge Baratta at 13. In addition, Judge Baratta agrees with Citizens' expert that AmerGen has failed to show that its second analysis, that omitted the effect of the cladding on the nozzle, was conservative. *Id.* at 13. In fact, Judge Baratta states plainly that because the cladding is made of different material than the base metal, it expands and contracts differently, adding to the stress in the nozzle. *Id.* Thus, "omitting the cladding would result in a non-conservative estimate of the CUF." *Id.*

Based on the evidence provided, Judge Baratta concludes that "the new information proffered by Citizens' evidence has properly raised an issue of serious safety significance that would likely lead to a different outcome, namely by providing the basis for adding requirements into the license . . . such as periodic inspections of the recirculation line nozzle for cracks." *Id.* at 14. He continues, "at the very least, the license renewal should be granted conditioned on AmerGen performing an analysis that includes the cladding and demonstrating that this new analysis produced a CUF that is less than or equal to the analysis in question." *Id.*

In contrast, the majority carries out no technical analysis at all and fails to explain why it does not believe additional enquiry into the conservatism of the confirmatory analysis would be

reasonable. Instead, it relies upon assertions by AmerGen, stating in conclusory fashion that omitting the cladding from the second analysis was permitted by the ASME code. Decision at 23-24; Affidavit of Gary Stevens, dated May 27, 2008 at ¶ 10. However, as Judge Baratta noted, Citizens' expert called these assertions into doubt by pointing out that AmerGen had not provided any plant-specific justification for the change in the assumption about the nozzle cladding and stating that without this change the analysis would likely have shown an exceedance of the acceptable fatigue limit. Second Hopfenfeld Decl. at ¶¶ 9-11. Thus, the issue of whether the confirmatory analysis was conservative was in dispute, making dismissal of the motion to reopen inappropriate. Moreover, the AmerGen's assertions that the confirmatory analysis fully conformed to the ASME code were bare assertions because AmerGen refused to provide a copy of any of the fatigue analyses at issue to Citizens. Decision, Dissent of Judge Baratta at 12.

As AmerGen argued cogently when requesting summary disposition of the admitted contention, "bare assertions . . . are insufficient to oppose a motion for summary disposition." AmerGen Motion for Summary Disposition of Citizens' Drywell Contention, dated March 30, 2007 at 5-6 *citing* 10 C.F.R. § 2.710(b); *Advanced Med. Sys., Inc.*, CLI-93-22, 38 N.R.C. 98, 102 (1993). Obviously, the corollary applies and bare assertions are also insufficient to obtain summary disposition. In deciding whether summary disposition is appropriate, Boards "must focus on whether the expert opinions are sufficiently grounded upon a factual basis." *Duke Cogema Stone & Webster (Savanna River Mixed Oxide Fuel Fabrication Facility)*, LBP-05-04, 61 N.R.C. 71, 80-81 ("DCS") (2005). This is because Federal Rule of Evidence 702 excludes expert testimony that lacks foundation. Therefore an improperly supported expert opinion cannot enable summary disposition. *DCS* at 80 (*quoting Daubert v. Merrel Dow*

*Pharmaceuticals, Inc.*, 509 U.S. 579, 589-90 (1993)). By analogy therefore, AmerGen cannot successfully defeat the motion to reopen using the unsupported assertion of its expert that the confirmatory analysis conforms to the ASME code. This conclusion applies with even more force, when the expert undoubtedly had access to the documents that could have supported his conclusion, but AmerGen declined to present these documents in order to prevent Citizens from seeing them.

In short, because AmerGen failed to submit well-founded testimony showing that its confirmatory analysis was appropriately conservative, despite ample opportunity to do, the majority should have inferred that it was likely that litigation of Citizens contention would have a material effect on the licensing proceeding and granted Citizens motion to reopen. To do otherwise, would unjustly deny Citizens the opportunity to fully litigate the basis of Amergen's bare assertions about the confirmatory analysis.

### 3. The Majority Ignored Critical Evidence And Cited Irrelevant Evidence

The majority's failure to find material facts in dispute regarding the potential effect of the new evidence may have resulted from its failure to take account of a number of critical pieces of evidence proffered by Citizens. For example, the majority erroneously states that "Citizens provide no factual evidence or expert testimony showing that the analysis performed at Oyster Creek employing the Green's function was improperly performed so as to result in a deficient, non-conservative CUF for the recirculation nozzle." Decision at 13. This is flatly incorrect. In fact, Dr. Hopenfeld's initial testimony stated that "instead of using the known ASME NB-3200 methodology the licensee [AmerGen] was using an unproven non-conservative method to calculate the CUFs." Hopenfeld Decl. at ¶ 8. In addition, as discussed above, Citizens used AmerGen's submission regarding the revised analysis to show definitively that the original

analysis was not conservative for a number of reasons, including a non-conservative CUF and  $F_{EN}$ .

Similarly, the majority incorrectly allege that Citizens had no support for their allegation that the original analysis method did not comply with the ASME code. Decision at 24 n. 22. In fact, as discussed above, Dr. Hopfenfeld provided testimony that the original analysis used an unproven non-conservative method, instead of the methodology provided by the ASME code.

Finally, the majority attempts to suggest that testimony from the NRC Staff about the likely safety consequences of recirculation nozzle failure suggests that consideration of the contention would be unlikely to cause a material difference in the outcome of this licensing proceeding. Decision at 21. This is entirely illogical. Licensing proceedings are based around a showing of reasonable assurance of compliance with the Commission's regulations and the Continuing Licensing Basis ("CLB"). As the majority concedes, a materially different result would include the imposition of a licensing condition. Decision at 26 n. 24. However, consideration of the likely consequences of non-compliance with the regulations is simply not required prior to imposing a licensing condition. Instead, as the Board has emphasized, the statutory requirement for adequate protection of public safety is provided by reasonable assurance of compliance with the Commission's regulations and the CLB. *E.g.* Initial Decision at 15.

Recently, the Board explained how the TLAA regulations are applied to metal fatigue. The  $CUF_{EN}$  is a fundamental parameter which determines whether or not an aging management program ("AMP") is required in accordance with 10 C.F.R. § 54.21(c)(1)(iii). *In the Matter of Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13 (July 31, 2008) at 112. The CUF analysis is not part of an AMP, instead an AMP must be

provided if the environmental corrected CUF exceeds 1.0. *See Id.* at 113-15. Thus, if the predicted CUF<sub>EN</sub> exceeds 1.0 here, there will be a material effect on the licensing proceeding, because a new AMP would be needed to be added to the license renewal application. Thus, consideration of the likely safety consequence of exceeding 1.0 is irrelevant to the resolution of whether the proposed contention could have a material effect on the outcome of the Oyster Creek licensing proceeding.

#### 4. The Majority Erred When It Found That The Contention Was Moot

The nature of the majority's error regarding the denial of the motion to reopen is fully revealed by its attempt to argue that the proposed contention was mooted by AmerGen's submission of the confirmatory analysis. Decision at 15-18. To reach this conclusion, the majority credits unsworn bare assertions by AmerGen that the confirmatory analysis is conservative, and bare assertions by AmerGen's expert that the analysis is compliant with the ASME code. It ignored the warnings of Dr. Hopenfeld and Judge Baratta that AmerGen had made the confirmatory analysis less conservative than the original analysis by neglecting the nozzle cladding, without providing any plant-specific justification. Second Hopenfeld Decl. at ¶¶ 10-11. Because the issue of whether the confirmatory analysis was conservative remains in dispute, it was inappropriate for the Board to jump to the conclusion that the contention was moot without any further deliberation. This is especially true because no party even made a motion seeking a finding that the proposed contention was moot.

#### 5. In The Alternative Further Discovery Should Have Been Permitted

In the alternative, if the Commission finds that the statements from AmerGen's expert regarding the confirmatory analysis are not bare assertions and the conservatism of the confirmatory analysis has not been properly disputed due to a lack of access to that analysis, it

should permit limited further discovery. Where intervenors cannot present countervailing facts to a response to a motion to reopen due to lack of discovery, intervenors should be allowed limited discovery for that purpose.<sup>5</sup> *In the Matter of Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 522 (1973); 10 C.F.R. §§ 2.710(c) & 2.1205(c). Thus, at minimum, the Board should have allowed limited discovery before denying the motion to reopen, as has been repeatedly requested by Citizens as an alternative approach. *E.g.* Citizen Response To Board Order at 4.

**D. Allowing AmerGen To Prevail Using A Bare Assertion That Citizens Had Limited Chance To Litigate Would Be Fundamentally Unfair (Issue C3)**

During the briefing of this motion, the essential dispute became whether AmerGen has presented sufficient evidence showing that the confirmatory analysis is appropriately conservative. After AmerGen submitted a summary of the confirmatory analysis to the Commission and the Staff, the Board requested additional briefing to explain the impact of that submission on the motion to reopen. Decision at 16 n. 13. Contrary to the majority's assertion, this approach did not "obviate any procedural prejudice." *Id.* Instead, it actually created procedural prejudice by allowing AmerGen and the Staff to make additional factual arguments about the deficiency of the proposed contention to which Citizens did not get the chance to reply, because the Board asked for simultaneous briefing from all the parties. *See* Citizens Response to

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<sup>5</sup> The majority cites to three cases for the proposition that discovery is not allowed to develop a motion to reopen or frame a contention. Decision at 25 n. 23. Of the cases cited, *Balt. Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325, 351 (1998), deals with an initial contention and so is not very useful. While the others deal with motions to reopen it is unclear whether these cases contradict the *Vermont Yankee* case cited above, because it is not clear whether the "inability to present countervailing facts exception" to the general rule was at issue. Moreover, neither of the reopening cases refer to the *Vermont Yankee* decision that established this exception. As discussed in detail below, allowing AmerGen to dismiss the proposed contention by deliberately concealing the basis of its metal fatigue evaluation would be manifestly unfair and contrary to the "cardinal rule of fairness." Thus, Petitioners believe that the Commission should clarify that the "inability to present countervailing facts exception" to the general rule remains applicable to motions to reopen.

Board Order at 3-4. In the absence of such an invitation for additional briefing from the Board, either AmerGen or the Staff would have had to make a motion to supplement or for mootness to which Citizens would have been able to respond. Citizens Motion to Strike at 3-6; 10 C.F.R. § 2.309(h)(3). Even though Citizens moved to strike the additional factual material and, in the alternative requested an opportunity to respond, the Board did not grant any relief at all. *See* Citizens Motion to Strike or for Other Appropriate Relief. This was prejudicial because the majority used the additional factual material submitted by AmerGen and the NRC Staff to deny the proposed contention. It also clearly violated the “cardinal rule of fairness” that requires parties to be afforded a meaningful opportunity to respond to new facts. *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-565, 10 N.R.C. 521, 524-25 (1979); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 N.R.C. 61, 83 n. 17 (1996); rev’d in part on other grounds, CLI-96-7, 43 NRC 235.

Moreover, here AmerGen had a major advantage because it had a copy of the confirmatory analysis, but it had refused to provide a copy to Citizens without providing good cause. This allowed AmerGen to make assertions about the confirmatory analysis that Citizens could not verify. Thus, even if Citizens had been granted the right to reply to the new factual assertions by AmerGen about the confirmatory analysis, Citizens would have been unable to fully litigate the new facts. In effect, the majority’s application of the Part 2 rules placed Citizens in a Catch-22. To get the majority to reopen the record, they needed to obtain the analyses possessed by AmerGen, but they could not obtain those analyses unless the majority reopened the record. This is an absurd unfair result that violates the Commission’s cardinal rule of fairness.

This procedural bind is made even more unfair because the need to reopen the record was not caused by any failure on the part of Citizens. Instead it was caused by AmerGen's failure to specify clearly how it had done the metal fatigue analysis in the License Renewal Application, and the Staff's failure to raise questions about the simplified method until after the record had closed. If the Commission wishes to preserve the "cardinal rule of fairness" and make plain that the Part 2 rules were not intended to subject intervenors to a world that could have been jointly conceived by Joseph Heller and Franz Kafka, it must grant some relief. This relief could either be to grant the motion to reopen because AmerGen has failed to present sufficient evidence on the issues in dispute, to allow some limited discovery and then allow Citizens to respond fully to AmerGen's bare assertions that the confirmatory analysis that neglects the cladding is conservative, or to create an exception to the need to meet the requirements for reopening when petitioners filed as soon as they could, but the filing occurs after the closing of the hearing record due to omissions by the licensee.

On the latter point, Citizens believe that it would be much fairer if there were an exception to the reopening rules when a proposed new contention is actually timely filed based upon new information after the record closes because a licensee failed to disclose critical information in its licensing application. The danger with the current rule is that licensees have every incentive to provide as little information as possible in the License Renewal Application to avoid providing information that could be used as the basis for an initial contention. In addition, the reopening rules requiring prediction of the chance of having a material effect on the outcome are extremely difficult to apply to situations where there is very limited knowledge because the proposed new contention is unrelated to contentions that have already been litigated. Moreover, where, as here, a licensee has studies that are germane to the issues addressed by the proposed

contention but refuses to provide them to the intervenors, Boards should draw an adverse inference and refuse to credit assertions that have no foundation due to the refusal to provide to petitioners the studies upon which they are based. To do otherwise, provides further incentives for concealment of information in an attempt to unfairly deny Citizens access to a hearing.

**E. Failing To Admit The Contention Would Violate The AEA And Traditional Notions Of Due Process (Issue C4)**

Courts have held that the hearing right provision in the Atomic Energy Act ("AEA") guarantees petitioners the opportunity to obtain a hearing on an issue that is material to licensing. Citizens Motion to Reopen at 10. For example, an NRC rule that allowed emergency planning exercises to be held after initial licensing was invalid because it meant intervenors could never obtain a hearing concerning the outcome of the exercises, contravening Section 189(a) of the AEA, 42 U.S.C. 2239(a). *Union of Concerned Scientists v. NRC*, 735 F.2d 1437, 1438-50 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1132 (1985) *accord Union of Concerned Scientists v. NRC*, 920 F.2d 50, 53 (D.C. Cir. 1990) (holding that "Section 189(a) [of the AEA] prohibits the NRC from preventing all parties from ever raising in a hearing a specific issue it agrees is material to [a licensing]... decision.").

Here, the proposed contention raises an issue that is material to relicensing. Citizens Motion to Reopen at 9-10. Indeed, the Staff has stated that it will supplement the Safety Evaluation Report after completing the review of the confirmatory analysis. Decision at 27 n. 25. Furthermore, a very similar issue has recently been the subject of a hearing in the Vermont Yankee proceeding and has been admitted as a contention in the Indian Point proceeding. Citizens have also had no prior opportunity to request a hearing on the issue raised by the proposed contention. Decision, Dissent of Judge Baratta at 3-5. Furthermore, Citizens were

limited in the factual support they could provide, because AmerGen refused to provide the underlying analyses to Citizens, *Id.* at 12, and the majority refused to allow any discovery at all. Decision at 25 n. 3. However, the majority found that Citizens had to provide more support to meet the requirements for motions to reopen. As Judge Baratta notes, 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 turn 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.

Thus, here the majority made it impossible for Citizens to obtain a hearing on the material issue raised by imposing very stringent requirements for reopening and disallowing any discovery, even when the majority felt Citizens showing was lacking and Citizens had clearly stated their need for the underlying analyses to fully state their case.<sup>6</sup> E.g. Citizens Response To Board Order at 4. Because this approach eviscerates Citizens right to hearing under the AEA, this outcome must be incorrect. Either the majority's interpretation of the rules is incorrect or the rules themselves are deficient. Because the majority should attempt to interpret the rules in a manner that is consistent with their authorizing statute, the majority should have avoided this conflict by admitting the proposed contention.

Finally, the net result of the ruling, if affirmed, would violate Citizens right to due process because it would allow Oyster Creek to be relicensed without full consideration of

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<sup>6</sup> In response AmerGen and the Staff may argue that if the Staff finds the confirmatory analysis wanting, Citizens could repetition for a hearing. This response would be inadequate for two main reasons. First, Citizens right to a hearing should be independent of the review of the NRC Staff. Second, such a finding would likely prompt AmerGen to do yet another fatigue analysis and Citizens would likely end up in exactly the same position as here. The only way to resolve this conundrum is to admit the contention and let AmerGen and Citizens litigate the issues that are in dispute.

Citizens' concerns that even at this late stage AmerGen has failed to show that the reactor meets the safety requirements designed to protect Citizens' lives and property.

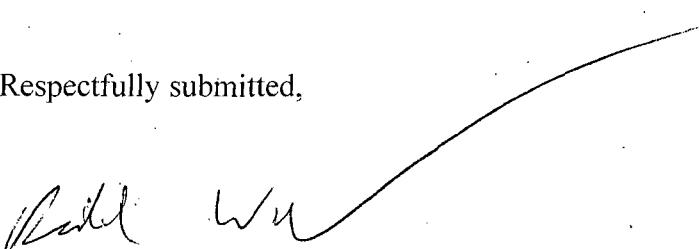
#### **IV. REASONS WHY COMMISSION REVIEW SHOULD BE EXERCISED**

The legal errors of the majority identified in this Petition either lacked governing precedent or misinterpreted governing precedent. 10 C.F.R. § 2.341(b)(4)(ii). The Board ignored critical facts, contradicted itself on a number of factual issues, and took account of irrelevant facts. 10 C.F.R. § 2.341(b)(4)(i). The factual and legal errors raise substantial and important questions of law and policy. 10 C.F.R. § 2.341(b)(4)(iii). The identified procedural errors were prejudicial. 10 C.F.R. § 2.341(b)(4)(iv). Finally, failing to correct these errors made would lead to a violation of federal law. 10 C.F.R. § 2.341(b)(4)(v).

#### **V. CONCLUSION**

For the foregoing reasons, the Commission should review the Decision and either admit the proposed contention or remand the matter to the Board for further proceedings after the Commission has provided guidance concerning the many legal and factual errors contained in the Decision.

Respectfully submitted,



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Dated: August 1, 2008

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of )  
 ) Docket No. 50-0219-LR  
AMERGEN ENERGY COMPANY, LLC )  
 )  
(License Renewal for the Oyster Creek )  
Nuclear Generating Station) ) August 1, 2008  
)

CERTIFICATE OF SERVICE

I, Richard Webster, of full age, certify as follows:

I hereby certify that on August 1, 2008, I caused Citizens' Petition for review of LBP-08-12 to be served via email and U.S. Postal Service (as indicated) on the following:

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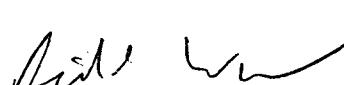
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