UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
E. Roy Hawkens, Chair
Dr. Paul B. Abramson
Dr. Anthony J. Baratta

In the Matter of:	)	March 5, 2007
AmerGen Energy Company, LLC	)	Docket No. 50-219
(License Renewal for Oyster Creek Nuclear Generating Station)	)	

AMERGEN'S ANSWER OPPOSING CITIZENS' FEBRUARY 6, 2007 MOTION FOR LEAVE TO ADD A CONTENTION AND MOTION TO ADD A CONTENTION

Pursuant to 10 C.F.R. § 2.309(h)(1), AmerGen Energy Company, LLC ("AmerGen") hereby files its Answer opposing Citizens'[1] Motion for Leave to Add a Contention and Motion to Add a Contention, dated February 6, 2007 ("Motion").[2] As discussed below, the Motion should be denied in its entirety because the proposed contention fails to meet the timeliness requirements set forth in 10 C.F.R. §§ 2.309(f)(2)

[1] Citizens are 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.

[2] The Board previously held that if Citizens elected to file a new contention, then AmerGen and the NRC Staff could file an answer in accordance with the requirements of 10 C.F.R. § 2.309(h)(1). *See* Memorandum and Order, LBP-06-16, 63 N.R.C. 737, 745 (2006). Accordingly, this response is due within 25 days of Citizens' submission, or by Monday, March 5, 2007, as required by Sections 2.309(h)(1) and 2.306 ("Computation of Time").

and (c)(1), and fails to meet the applicable substantive standards for admissibility set forth in 10 C.F.R. § 2.309(f)(1).

I. INTRODUCTION

This is Citizens' fourth untimely challenge to the acceptance criteria for the drywell shell. In this latest iteration, the proposed contention alleges deficiencies in the acceptance criteria for required thickness of the sand bed region of the Oyster Creek Nuclear Generating Station's ("OCNGS") drywell shell. General Electric Nuclear Energy ("GE") developed these criteria in the early 1990s. Citizens now claim that a recent analysis performed by Sandia National Laboratories ("Sandia") and two AmerGen documents provide new and material information that call into question the acceptance criteria identified in GE's analyses. Motion at 2-3, 9. Citizens allege that:

> The computer modeling undertaken by General Electric, upon which the disputed acceptance criteria are based, used unjustified factors leading to underestimation of the uniform required thickness by over 0.108 inches and of the small area required thickness by over 0.082 inches. For this reason, the acceptance criterion for the average thickness of each bay of the drywell shell should be increased to around 0.844 inches to ensure the ASME Code safety requirements are met or should be replaced with a set of criteria based on accurate and realistic three dimensional modeling of further degradation in the sandbed. For similar reasons, the acceptance criterion for small area thickness should be increased to at least 0.618 inches or integrated into the acceptance criteria derived from further three dimensional modeling.

Motion at 6.

This latest Motion should be recognized for what it is: yet another attempt by Citizens to expand the scope of the proceeding and introduce delay by means of a pleading laden with repetitive, unfounded, and non-meritorious speculation, and error – not to mention incomplete information. Substance aside, Citizens are now also using documents obtained in the mandatory disclosure process to recycle old arguments and

resurrect a contention that was *already incurably late eight months ago*, when they identified alleged deficiencies in the drywell shell acceptance criteria in their "Petition to Add a New Contention" (June 23, 2006) ("June 23 Petition"). *See* Memorandum and Order, LBP-06-22, 64 N.R.C. __, slip op. at 10-14 (Oct. 10, 2006).

As explained below, each item of allegedly "new" information cited by Citizens in the instant Motion represents a preliminary or incomplete analysis of the purported technical issues. In some cases, Citizens are, or should have been, aware of the resolution of these issues. In the remaining cases, the information Citizens cite is irrelevant to the acceptance criteria. Absent any valid substantive basis for admissibility, in combination with the absence of any valid justification for late filing, the Board must reject Citizens' newest proposed contention as a matter of law.

A. Procedural Posture

The procedural history of Citizens' previous attempts to raise allegations regarding the drywell shell acceptance criteria highlights the repetitive, erroneous, and non-meritorious aspects of Citizens' Motion. Citizens' "Request for Hearing and Petition to Intervene" (Nov. 14, 2005) ("Original Petition") did not challenge the acceptance criteria. Quite the contrary – Citizens' initial drywell contention relied on comparisons of UT thickness data to the now-disputed general area thickness criterion. Original Petition at 9. Three months later, however, in a "Motion for Leave to Add Contentions or Supplement the Basis of the Current Contention" (Feb. 7, 2006) ("Feb. 7 Motion"), Citizens questioned the acceptance criteria for the first time:

> the original acceptance criterion for the thickness measurements was 0.736 inches, but some measurements taken in 1992 were less than . . . that. Thus, *new acceptance criteria must be developed* to ensure that the currently unacceptable areas do not grow to levels where they threaten the structural integrity of the drywell liner.

Feb. 7 Motion at 12. The Board rejected Citizens' Motion because it was not based on new, materially different information. *See* Memorandum and Order, LBP-06-11, 63 N.R.C. 391, 298 (2006).

Over four months later, Citizens recycled this erroneous[3] allegation into two similarly unfounded contentions when they filed their June 23 Petition, this time relying on AmerGen correspondence with the NRC Staff. *See* LBP-06-22, slip op. at 10. Citizens included this argument in the text of the following proposed contention:

> AmerGen must provide an aging management plan for the sand bed region of the drywell shell that ensures that safety margins are maintained throughout the term of any extended license, but the proposed plan fails to do so because the acceptance criteria are inadequate . . . .

June 23 Petition at 4.

Prior to any Board ruling, Citizens reiterated their challenge to the acceptance criteria in a July 25, 2006 "Supplement to Petition to Add a New Contention" ("Supplement"). This time, they relied on a report from a new consultant, Stress Engineering Services, Inc. ("SESI"), which essentially claimed that the GE reports that developed the acceptance criteria were outdated, and that newer "state-of-the-art" structural analysis methods are available. Letter, from R. Biel, SESI, to R. Webster, Rutgers Environmental Law Clinic, at 2 (July 15, 2006) (attached to Supplement as "Cursory Check of Structural Analyses, Oyster Creek Drywell Vessel"), at 2; *see also* Supplement at 17-22.

---

[3] As Citizens now apparently understand, the 1992 UT thickness measurements below 0.736" still met ASME Code requirements. *See* Motion at 9.

The Board rejected these second and third challenges to the acceptance criteria because it found that Citizens were well aware of these criteria at the time of their Original Petition. LBP-06-22, slip op. at 12-14 ("Thus, any challenge to the adequacy of AmerGen's acceptance criteria should have been made at the time Citizens filed their initial Petition to Intervene.").

Also germane to the disposition of the instant Motion is the fact that the OCNGS license renewal application has been the subject of three meetings with the Advisory Committee on Reactor Safeguards ("ACRS") and its License Renewal Subcommittee: Subcommittee meetings on October 3, 2006 and January 18, 2007; and a full Committee meeting on February 1, 2007. *See* Letter from W. Shack, ACRS Chairman, to D. Klein, NRC Chairman, "Report on the Safety Aspects of the License Renewal Application for the Oyster Creek Generating Station," at 1 (Feb. 8, 2007) ("Exhibit 1"). Citizens' representatives participated in all three of these meetings, listening to the dialogue between the ACRS, applicant, and NRC Staff. Their legal counsel even provided lengthy oral presentations, sometimes accompanied by slides, at *each* of the three meetings.

This level of participation by Citizens is particularly important because Citizens' Motion relies on the events of the January 18 Subcommittee meeting, but fails to even mention that a subsequent meeting occurred on February 1. The Motion ignores the dispositive information that AmerGen and the NRC Staff presented to the ACRS at the February 1 full Committee meeting – a meeting that counsel for Citizens attended and even presented at, but did not mention in a Motion filed five days later. Thus, Citizens'

counsel filed a Motion that he arguably should have known was, either all or in part, without merit.[4]

B. Legal Standards Governing the Admissibility of Citizens' New Contentions

The standards governing admissibility of Citizens' new contention are set forth in the Board's March 22, 2006 Order denying Citizens' Motion to Add or Supplement. *See* LBP-06-11, 63 N.R.C. at 395-396; Memorandum and Order (Denying Citizens' Motion for Leave to Add Contentions and Motion to Add Contention) at 5-6 (Feb. 9, 2007) (unpublished) ("Feb. 9 Order"). Where, as here, the regulatory time limit has long since expired for filing a petition to intervene, a petitioner may submit a new contention only with leave of the presiding officer upon a showing that:

(i) The information upon which the amended or new contention is based was not previously available;

(ii) The information upon which the amended or new contention is based is materially different than information previously available; and

(iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

See 10 C.F.R. § 2.309(f)(2)(i)-(iii).

If a new contention meets the above three criteria, then it is considered "timely" and the petitioner is not required to satisfy the requirements of 10 C.F.R. § 2.309(c)(1) for non-timely filings. LBP-06-11, 63 N.R.C. at 396 n.3; Feb. 9 Order at 5-6. If, however, the information underlying the proposed contention is not new or materially

---

[4] In this regard, Citizens appear to have "failed to disclose critical information," the same accusation they leveled against AmerGen and Exelon in their "Motion to Apply Subpart G Procedures," at 1 (May 5, 2006). This failure raises serious questions regarding compliance with counsel's "manifest and iron-clad obligation of candor." *Public Serv. Co. of Okla.* (Black Fox Station, Units 1 & 2), ALAB-505, 8 N.R.C. 527, 532 (1978) (admonishing counsel for failure to bring relevant *(footnote continued)*

different from previously-available information, then to be admitted, the new contention must satisfy the eight factor balancing test in Section 2.309(c)(1) as well. LBP-06-11, 63 N.R.C. at 396 n.3; Feb. 9 Order at 6 n.7.[5]

Commission precedent makes clear that the eight factors in Section 2.309(c)(1) are not of equal importance: absence of good cause (factor 1) and the likelihood of substantial broadening of the issues and delay of the proceeding (factor 7) are the most telling. *See, e.g.*, *Project Mgmt. Corp.* (Clinch River Breeder Reactor Plant), ALAB-354, 4 N.R.C. 383, 395 (1976). Factors 5 (availability of other means) and 6 (interests represented by other parties) are entitled to the least weight. *See Private Fuel Storage, L.L.C.*, LBP-00-08, 51 N.R.C. 146, 154 (2000) (citing *Commonwealth Edison Co.* (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 N.R.C. 241, 244-45 (1986)).

Even if the temporal criteria established by Section 2.309(f)(2) and (c)(1) are satisfied, a petitioner also must satisfy the following substantive admissibility requirements in 10 C.F.R. § 2.309(f)(1): (1) specify the issue to be raised; (2) briefly explain the basis for the contention; (3) demonstrate that the issue is within the scope of the proceeding; (4) demonstrate that the issue is material to the proceeding; (5) provide a

---

evidence to the attention of the Appeal Board); *see also Nuclear Mgmt. Co., LLC* (Palisades Nuclear Plant), LBP-06-10, 63 N.R.C. 314, 382-84 (2006) (J. Young, Additional Statement).

[5] Section 2.309(c)(1) sets forth the following factors to be considered in the admission of non-timely contentions: (1) good cause, if any, for failure to file on time; (2) the nature of the petitioner's right under the [Atomic Energy] Act to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; (4) the possible effect of any order that may be entered in the proceeding on the petitioner's interest; (5) the availability of other means whereby the petitioner's interest will be protected; (6) the extent to which the petitioner's interests will be represented by existing parties; (7) the extent to which the petitioner's participation will broaden the issues or delay the proceeding; and (8) the extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record.

concise statement of the alleged facts or expert opinion that support the petitioner's opinion; and (6) demonstrate that a genuine dispute exists on a material issue of law or fact, and include specific references to allegedly deficient portions of the application.

As discussed below, Citizens' new contention fails to meet the requirements of 10 C.F.R §§ 2.309(f)(2), (c), and (f)(1).

II. CITIZENS' CONTENTION IS INADMISSIBLE AND MUST BE REJECTED AS A MATTER OF LAW AND FACT

A. Background Information

Before the sand was removed from the sand bed region in 1992, GE performed an engineering analysis of the Oyster Creek drywell shell to determine whether historical corrosion prevented the drywell from performing its intended functions. GE conducted this analysis in 1991, based on ASME Code requirements, to establish the minimum required general thickness, with the sand removed, for both pressure and buckling stresses.[6]

The results of GE's analysis show that the minimum required thickness in the sand bed region is controlled by buckling. Moreover, a general thickness acceptance criterion of 0.736" will satisfy ASME Code requirements with a safety factor of 2.0 against buckling for the controlling refueling load combination, and 1.67 safety factor for the post-accident load combination (*i.e.*, flooding of the containment). *See* ACRS Info.

---

[6] Citizens' Dec. 20, 2006 Motion to Add Contentions, Exh. ANC-2 at 6-7 ("ACRS Info. Package"). The analysis uses a finite-element model (36 degree slice) of the drywell. *Id.* The 36 degree slice derives from the configuration of ten "bays" in the sand bed region created by the torus vent headers. These vent headers stiffen the shell in these areas. *Id.* at 6-9.

Package at 6-8. Locally-thinned areas are evaluated against a minimum local average thickness acceptance criterion of 0.536".[7]

GE performed its buckling analysis in conformance with the methodology set forth in ASME Code Case N-284, "Metal Containment Shell Buckling Design Methods, Section III, Class MC." The capacity reduction factors in that Code Case, however, do not account for orthogonal stresses in which one of the stresses is in tension (*i.e.*, the type of loading considered in the GE analysis). Thus, with involvement and input from the author of Code Case N-284, Dr. Clarence Miller, GE used a modified capacity reduction factor of 0.340 to account for the presence of tensile stress. ACRS Tr. at 96-97 (Jan. 18, 2007) ("ACRS Jan. 18 Tr.") *available in ADAMS at* ML070240433. This factor was based upon the effects of hoop tension, which would be present in the refueling load combination. *Id.* at 96.

The NRC Staff approved GE's initial analysis in a Safety Evaluation Report ("SER") dated April 24, 1992 ("Exhibit 2"). The Staff concurred with the conclusion that the Oyster Creek drywell shell meets ASME Code requirements. The NRC explicitly accepted use of Code Case N-284 for purposes of the Oyster Creek analysis and accepted use of the modified capacity reduction factor. *See* Exhibit 2, at 4. Accordingly, the GE analysis is the analysis of record for purposes of license renewal, and is part of the plant's current licensing basis.

On January 18, the ACRS Subcommittee asked AmerGen to discuss GE's use of this modified capacity reduction factor during the February 1 meeting. AmerGen and the Staff discussed the issue to the ACRS' satisfaction at the February 1 meeting. *See* ACRS

---

[7] ACRS Info. Package at 6-8, 6-18. If any local UT measurements reveal thicknesses below 0.736", a separate evaluation is done to confirm that the locally-thin areas, in the as-found condition, meet ASME Code criteria.

Tr. at 215 (Feb. 1, 2007) *available in ADAMS at* ML070430485 ("ACRS Feb. 1 Tr."); Exhibit 1, at 2 ("The staff reaffirmed its position that the use of the increased capacity reduction factor is appropriate for the analysis of the OCGS drywell shell. We concur with this position.").

In support of its review of the Oyster Creek license renewal application, the NRC Staff sponsored Sandia to perform an independent, confirmatory analysis of the Oyster Creek drywell.[8] Sandia finalized its report before the February 1 meeting, so the final report uses a capacity reduction factor of 0.207 because the Sandia analysts could not find a justification for the increased value of 0.340 used by GE. Sandia Report at 67; ACRS Jan. 18 Tr. at 242-43. Using a 0.207 capacity reduction factor, Sandia generated a general average thickness criterion of 0.844". Sandia Report at 79. It was not until the February 1 ACRS meeting that Dr. Miller explained why the use of the 0.340 capacity reduction factor was appropriate. ACRS Feb 1 Tr. at 205-208, 212-215. The NRC Staff explained during the February 1 meeting that, had Sandia used 0.340 instead of 0.207, Sandia's 0.844" general thickness criterion would have been "less than" GE's 0.736" general thickness criterion. *See* NRC Staff Presentation to ACRS at 11 (Feb. 1, 2007), *available in ADAMS at* ML070440100. The ACRS accepted this conclusion during its February 1 meeting and documented its acceptability in its subsequent letter to the Commission. *See* Exhibit 1, at 2.

---

[8] Jason P. Petti, "Sandia Report: Structural Integrity Analysis of the Degraded Drywell Containment at the Oyster Creek Nuclear Generating Station" (January 2007), *available in ADAMS at* ML070120395 ("Sandia Report").

A. Bases for the Proposed Contention

The late-filed contention relies on four items Citizens mistakenly claim contain "significant and material new information." Motion at 2; *see also id.* at 3, 9. First, they point to the final Sandia Report, which Citizens claim, "reaches a very different result" from the GE analysis because its authors "rejected" the use of an increased capacity reduction factor used in the GE analysis. Motion at 7. Accordingly, Citizens argue that the existing general and local area thickness criteria need to be modified.

Second, Citizens next put on blinders and cite "comments on the Sandia Study made at the January 18, 2007 meeting of the ACRS." *Id.* In doing so, they completely ignore the subsequent February 1 meeting of the full ACRS. Based on the results of the Sandia Report, and the NRC Staff and ACRS comments at the January 18 meeting, Citizens argue that the minimum wall thickness acceptance criteria should be increased. *Id.* at 9.

Third, looking back to the fall 2006 refueling outage, Citizens cite a preliminary report AmerGen recently produced to them via the mandatory disclosure process to challenge "the latest UT results" taken by AmerGen during October 2006. *Id.* at 3, 7. According to Citizens, the new "full information" shows that "worst point" thickness measurements have decreased by 0.118" since 1992. *Id.* at 3. Therefore, Citizens argue that, "it has become even more critical to accurately estimate how much any existing margin has been reduced." *Id.*

Finally, Citizens cite Assignment Report ("AR") 00461639, a document they also recently obtained through the mandatory disclosure process, which allegedly "acknowledges AmerGen's failure to show that the local wall thickness acceptance criteria would maintain ASME Code requirements." *Id.* at 9. Citizens claim that this

document supports the Sandia Report's "suggestion" that the local area minimum wall thickness should be amended to 0.618". *Id.*

B. The Proposed Contention Does Not Meet the Timeliness Requirements of 10 C.F. R. §§ 2.309(f)(2) and (c)(1)

1. The Proposed Contention Does Not Meet the Requirements of 10 C.F.R § 2.309(f)(2)

As explained in detail below, Citizens' proposed new contention is untimely because its first two bases do not constitute information that is materially different from what was previously available, contrary to 10 C.F.R. § 2.309(f)(2). Moreover, Citizens' first two bases mislead the Board. As we have seen, Citizens cite to the Sandia Report and comments on that report at the January 18, 2007 ACRS Subcommittee meeting to allege fundamental flaws in the GE analysis, without even mentioning that these alleged flaws were entirely and unambiguously resolved during the subsequent presentations made by AmerGen and the NRC Staff at the February 1 ACRS meeting.

With respect to Citizens' remaining two bases, the preliminary statistical analysis of the 2006 UT results and AR 00461639, the first is irrelevant to the acceptance criteria, and the second is not new information. Thus, Citizens have failed to proffer new, materially different information to support their new late-filed contention as required under Section 2.309(f)(2). Rather, Citizens cite these documents in a misguided attempt to suggest that AmerGen does not understand the condition of the drywell, as part of their rhetorical campaign to prevent issuance of a renewed license. Such tactics have no place before the Board.

(a) The Sandia Report: Citizens argue that, although they have previously challenged the GE analysis, "they have not previously contended that the GE modeling, upon which the disputed acceptance criteria are based, used unjustified factors leading to

systemic underestimation of the required [thicknesses]." Motion at 2. Nothing in this statement even suggests that the new contention is based on new information not previously available, nor does it excuse Citizens' earlier failure to mount an adequate challenge.

It is quite apparent that the GE analyses that developed the acceptance criteria are not new. Citizens did not challenge them in their Original Petition. The Board already has excluded Citizens' previous challenges to the GE report for lack of timeliness: "Had Citizens wished to challenge the methodology used to determine this acceptance criteria for the sand bed region, it had an obligation – once it became aware of that criteria – to obtain the information necessary to advance such a challenge." LBP-06-22, slip op. at 12. In LBP-06-22, the Board rejected Citizen's attempt to use its own expert – SESI – to challenge decade-old acceptance criteria. It is unclear why Citizens believe that using the NRC's contractor – Sandia – to challenge those same acceptance criteria would be timely eight months later. Citizens simply recycle their previously-rejected claim under the cover of the Sandia Report and the partial discussion of that report at the ACRS Subcommittee meeting.

Citizens allege that the report "reaches a very different result from the GE modeling upon which AmerGen is relying to justify its acceptance criteria." Motion at 7. This is incorrect. As Citizens point out, "the Sandia Study predicted no *definitive* violations of ASME code requirements," *id.* at 4 (emphasis in original), and that was by using a 0.207 capacity reduction factor. The NRC Staff views the results of the Sandia Report as confirming the GE analysis. ACRS Feb. 1 Tr. at 244 ("We are satisfied that that analysis confirms the 1992 licensing basis.").

Moreover, as discussed above, the factors used in the GE modeling analysis have been available for over a decade, and when the disputed 0.340 capacity reduction factor is applied to the Sandia analysis, the minimum thickness is *less than* GE's 0.736" general area thickness criterion. NRC Staff Presentations to the ACRS at 11 (Feb. 1, 2007), *available in ADAMS at* ML070440100.

Thus, the Sandia Report does not provide new, materially different information that justifies revising this Board's previous conclusion that, "any challenge to the adequacy of AmerGen's acceptance criteria should have been made at the time Citizens filed their initial Petition to Intervene. It cannot be submitted at this late juncture." LBP-06-22, slip op. at 14.

(b) January 18 ACRS Subcommittee Meeting: Citizens also allege that "comments on the Sandia Study made at the January 18, 2007 meeting of the ACRS" also justify their new contention. Specifically, Citizens note that ACRS Member Dr. Said Abdel-Khalik "pointed out that the thickness of 0.736 inches would yield a factor of safety of 1.27 if the GE model were used without the increased capacity reduction factor." Motion at 8.

The information from the January 18 meeting is not materially different than previously-available information, because the ACRS' concerns were resolved at the February 1 meeting, *with information that has been available for years*, as documented in the NRC's 1992 SER. The Sandia Report itself concluded that there were no violations of ASME Code requirements as a result of its analysis. Motion at 4 (citing Sandia Report at 13). During the February 1 meeting of the full ACRS, Dr. Clarence Miller, the author of the applicable ASME Code Case N-284, explained that it was acceptable to use the

0.340 capacity reduction factor under the ASME Code. This capacity reduction factor was derived from tests conducted on metal cylinders. Dr. Miller, however, demonstrated that the increased capacity factor also could be used for spheres, such as the drywell shell. ACRS Feb. 1 Tr. at 205-208, 212-215. The NRC Staff concurred with this conclusion, as it had done 15 years earlier, in its April 24, 1992 SER, which is and has been publicly available. *See id.* at 242 ("*We had made that same determination in 1992.* We made the same determination again in 2006.") (emphasis added); Exhibit 2, at 4. In its final report to the Commission, the ACRS also concurred with Dr. Miller's opinion that the increased capacity reduction factor was permissible. Exhibit 1, at 2 ("We concur with this position.").

Further, the fact that ACRS members sought clarification regarding the GE analysis hardly provides sufficiently new and material information to support a contention. This basis can therefore be rejected for the same reason this Board rejected Citizens' previous attempts to litigate the acceptance criteria:

> To the extent Citizens seek to create the impression that, because the NRC Staff sought clarification of AmerGen's methods for deriving the acceptance criteria, these methods were previously unknown to the Staff or were otherwise altered, such an impression is demonstrably incorrect. . . . [T]he analyses currently in effect for Oyster Creek are the same as those documented in the early 1990s.

LBP-06-22, slip op. at 13-14.

Thus, the January 18 ACRS Subcommittee meeting did not reveal new and materially different information as required by 10 C.F.R § 2.309(f)(2).

(c) The Latest UT Results: Citizens argue that the October 2006 UT results show "that the sandbed is now 0.02 inches thinner than it was in 1992 on average and over 0.1 inches thinner in certain spots, indicating that ongoing corrosion may be occurring."

Motion at 3. For support, they cite to a preliminary analysis, dated November 9, 2006, prepared by an AmerGen consultant analyzing the October 2006 UT data. AmerGen produced this initial analysis to Citizens as part of the mandatory disclosure process on January 26, 2007, and the document is Citizens' Exhibit ANC-7.

Citizens do not even attempt to connect this information to their proposed new contention. Instead, they simply castigate, "[b]ecause the wall thickness is now less than measured in 1992, it has become even more critical to accurately estimate how much any existing margin has been reduced." Motion at 3. This statement is completely irrelevant to the proposed contention: whether "[t]he computed modeling undertaken by General Electric . . . used unjustified factors leading to underestimation" of the required thickness of the drywell shell. *See* Motion at 6.

Absent any connection between the latest UT results and the acceptance criteria, these data are simply irrelevant (as opposed to new and material) to the proposed new contention and do not meet the requirements of 10 C.F.R. § 2.309(f)(2).

(d) Assignment Report (AR) 00461639: AmerGen also produced this document on January 26, 2007, identified by Citizens as ANC-8, under the mandatory disclosure process. The document is an internal critique of a now-superseded 1993 calculation that analyzed UT data collected during the 1992 refueling outage. The calculation was used to demonstrate that the 1992 drywell thickness data met design specifications. ANC-8 at 1. Pointing to the statement in Item 4 of this document, Citizens claim that under the GE calculation, the "ultimate theoretical buckling capacity" is reduced by 9.5% and may not meet Code requirements. Motion at 5 (citing ANC-8 at 2).

Some background on ARs is useful to understand why this document does not constitute new, materially different information. ARs are part of OCNGS' corrective action program. An employee who identifies a concern with any part of the plant, its operations, or its processes, programs, or procedures, can author an AR. The first part of the AR identifies the observed or alleged deficiencies. The second part of the AR verifies the validity and documents the resolution of the observed deficiencies. ARs are electronic records and can be printed at any time before, during, or after this resolution.

Citizens' Motion emphasizes the initial observation at issue, but omits any discussion of its ultimate resolution. The resolution, however, is identified on the last page of the AR as "Assign # 02" with the following description: "Revise calculation C-1302-187-5320-024 to address issues . . . ." Citizens' Exhibit ANC-8 at 5. AmerGen produced a copy of the revised calculation referenced in the AR to Citizens on December 12, 2006, and it is appended to this Answer as Exhibit 3. Thus, Citizens had the resolution of this AR in their possession for nearly 60 days before they filed their Motion.[9]

Thus, AR 00461639 is not new, nor is it materially different information as required by 10 C.F.R. § 2.309(f)(2). Citizens' contention is therefore untimely, and must meet the requirements of Section 2.309(c).

---

[9] AmerGen submitted the same document to the ACRS on December 8, 2006, as Reference 42 to the ACRS Information Package. It is worth reiterating that Citizens submitted this package to the Board, listing the revised calculation as a reference, as Exhibit ANC-2 in their December 20 Motion to Add Contentions.

2. The Proposed Contention Does Not Meet the Requirements of 10 C.F.R § 2.309(c)

Citizens have not met the requirements of the eight-factor test for non-timely filings under 10 C.F.R § 2.309(c)(1) because they have not shown good cause for failure to file on time (factor 1). Furthermore, the contention would unreasonably broaden the issues and delay the proceeding (factor 7), and litigation of the contention would be unlikely to assist in developing a sound record on this issue (factor 8). Factors 2, 3, and 4, listed in note 5 above, speak to standing issues that are irrelevant to Citizens' Motion. Because the two most important factors, 1 and 7, weigh strongly against Citizens, as does factor 8, the balance under Section 2.309(c)(1) strongly favors denial of their Motion.

Citizens have not demonstrated good cause under Section 2.309(c)(1)(i) for failure to adequately challenge the acceptance criteria in a timely manner. In their Motion, they claim good cause "because they could not have filed the contention before the Sandia Study was published." Motion at 13. This statement is simply incorrect. The text of the proposed new contention does not even reference the Sandia Report. Motion at 6. The alleged deficiencies discussed in the text of the contention – underestimation of the uniform and small area required thicknesses – could have been identified with the information available at the time Citizens filed their Original Petition. *See* LBP-06-22, slip op. at 12. Citizens chose not to pursue such a challenge in a timely fashion, and they should not be permitted to do so now.

Further, the Motion introduces allegations based on issues raised and resolved before the ACRS, thereby unreasonably broadening the issues and delaying the proceeding, contrary to the Section 2.309(c)(1)(vii). As we have seen in Section B.1, above, AmerGen and the NRC Staff addressed *all* of the relevant issues from the January

18 Subcommittee meeting in detail before the full ACRS and counsel for Citizens on February 1, 2007.

Finally, as discussed throughout this Answer, the Motion demonstrates a lack of understanding of the technical issues, presents unsupported allegations, and omits dispositive information known to Citizens. As a result, Citizens' litigation of this late-filed contention would be unlikely to assist in developing a sound record, as described in Section 2.309(c)(1)(viii).[10]

For these reasons, even if the Board finds that Citizens have met the requirements of 10 C.F.R § 2.309(f)(2), the balance of the relevant factors under Section 2.309(c)(1) weigh heavily against admission of Citizens' new late-filed contention.

C. The Proposed Contention Does Not Meet the Requirements of 10 C.F.R. § 2.309(f)(1)

In addition to its lack of timeliness, Citizens proposed new contention lacks any substantive merit, because none of the bases cited by Citizens raises a genuine dispute on a material issue of law or fact.[11] As discussed in Section A, above, Citizens' first two bases mislead the Board and omit dispositive information. The remaining alleged bases are not relevant to the proposed new contention. Also, both of the remaining bases rely

---

[10] Further, the Motion once again highlights broader "concerns . . . regarding the degree to which it seems Citizens are able to contribute to the formation of a record in this proceeding." Feb. 9 Order at 21 (J. Abramson, concurring).

[11] The late-filed contention also is arguably outside the scope of a license renewal proceeding because it challenges the current licensing basis. As discussed above, the GE analysis uses methods permitted by the ASME code and approved by the NRC's SER in 1992. Thus the acceptance criteria form part of the current licensing basis, and are not subject to challenge in a license renewal proceeding. *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 N.R.C. 3, 8-9 (2001); *see also* LBP-06-22, slip op. at 32. AmerGen's continued use of the acceptance criteria derived from that analysis was not open to challenge at any point during license renewal, much less at this late stage. Thus, Citizens' late-filed contention also could be dismissed under 10 C.F.R § 2.309(f)(1)(iii).

on preliminary documents obtained by Citizens under the mandatory disclosure process for the admitted contention, and AmerGen has resolved the concerns identified in both documents through its internal processes.

(a) The Sandia Report: Citizens allege that, although the Sandia Report predicted no violations of ASME code requirements, it "showed that the GE modeling relied upon by AmerGen had some critical flaws." Motion at 4. Sandia allegedly "reaches a very different result . . . primarily because the GE study assumed that [the capacity reduction factor] should be 0.34, whereas Sandia used a value of around 0.2." *Id.* at 7. Therefore, Citizens contend, AmerGen should adopt the Sandia criteria or "replace [the GE analysis] with a set of criteria based on an accurate and realistic three dimensional modeling . . . ." *Id.* at 6.

As discussed above, however, the Sandia Report was intended to, and did, confirm the earlier GE analyses.[12] While the Sandia analysts did not obtain sufficient evidence to use a 0.340 capacity reduction factor prior to issuing their final report, Sandia Report at 67, this evidence is now in the record and the Staff has testified that if Sandia had used the 0.340 capacity reduction factor then it would have resulted in a minimum general area thickness of less than 0.736." ACRS Feb. 1 Tr. at 242-43. Moreover, the ACRS has accepted and concurred with the use of the 0.340 value. Exhibit 1, at 2.

Although the Sandia analysis used a different methodology, this study does not invalidate the GE results, nor does it challenge whether AmerGen's techniques are code-

---

[12] As ACRS Subcommittee Chairman Dr. Maynard observed at the January 18 meeting, "Personally, I'm not bothered by some of the differences between the GE and the Sandia analysis. I think it's good to approach things from different ways. I think they both show that there's [sic] additional conservatisms that are still in both of the analyses. They're still very conservative analyses." ACRS Jan. 18 Tr. at 369.

compliant or satisfy NRC requirements. *See* ACRS Feb. 1 Tr. at 243. The fact that other allegedly improved or state-of-the-art methods may exist to meet those requirements does not raise a genuine dispute of material fact or law under 10 C.F.R § 2.309(f)(1)(vi) – instead, this argument is an impermissible challenge to the applicable NRC regulations. *See, e.g.*, *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit No. 1), LBP-83-76, 18 N.R.C. 1266, 1273 (1983) (holding that the Intervenor's assertion that a different analytical technique should be used other than that called for by the NRC regulations and incorporated ASME Code provisions "does attack the Commission's regulations and is rejected").[13]

For the above reasons, the Citizens have failed to articulate a genuine dispute of material fact arising from the Sandia Report.

(b) January 18 ACRS Subcommittee Meeting: As discussed in Section B.1, above, Citizens allege that the comments of Dr. Abdel-Khalik and others at this meeting justify their new contention. AmerGen, however, fully addressed the ACRS members' questions posed at the January 18 ACRS Subcommittee meeting at the February 1, 2007 meeting. AmerGen Exhibit 1, at 2.

The meeting transcript, moreover, shows that Dr. Abdel-Khalik's question was hypothetical and speculative. ACRS Jan. 18 Tr. at 292-93 ("Let[']s say you backtrack . . . and you ask your experts and they say, no, the ASME code does not allow this . . . . What would have been your response . . . ?"). AmerGen then addressed these concerns

---

13 Additionally, as was discussed at the February 1 ACRS meeting, and as recommended by the ACRS, AmerGen recently docketed a commitment to perform a three-dimensional finite-element analysis of the drywell shell prior to entering the period of extended operation. Letter from M. Gallagher, AmerGen, to NRC Document Control Desk, "Additional Commitments Related to the Aging Management Program for the Drywell Shell, Associated with AmerGen's License Renewal Application (TAC No. MC7624)" (Feb. 16, 2007).

directly at the February 1, 2007 full Committee meeting by showing that the ASME code *allows* the use of the 0.340 capacity reduction factor. ACRS Feb. 1 Tr. at 205-208.

Citizens also point to "acknowledgments" from Sandia and the NRC Staff that AmerGen's safety margin calculations would be "considerably lower" if Sandia's 0.844" minimum thickness value were used instead of 0.736" used in the GE analysis. Motion at 8. This also is irrelevant. Sandia developed the 0.844" value without using the increased capacity reduction factor. As we have seen, if Sandia had used the increased capacity reduction factor, then they would have reached results very similar to the GE analyses.

Having failed to challenge the resolution AmerGen and the NRC Staff presented at the February 1 meeting, Citizens also have failed to identify a material dispute of fact arising from the January 18 ACRS Subcommittee meeting.

(c) The Latest UT Results: As discussed in Section B above, the October 2006 UT results simply are not relevant to the proposed new contention because Citizens fail to make a connection between the UT results discussed in Citizens' Exhibit ANC-7 and any deficiency in the acceptance criteria. Instead, they offer the observation that, "[b]ecause the wall thickness is now less than measured in 1992, it has become even more critical to accurately estimate how much any existing margin has been reduced," Motion at 3, and the even more irrelevant allegation that "the . . . 2006 exterior UT results undercut AmerGen's belief that the proposed aging management program for the sand bed region will provide reasonable assurance that the loss of intended function would be detected before safety requirements are violated . . . ." Motion at 10.

Even if there were any connection between this information and any alleged deficiency in the acceptance criteria, the preliminary analysis Citizens cite has been

superseded by a final analysis, and the technical issues raised in the preliminary analysis have been resolved. Namely, Citizens' Exhibit ANC-7 is a November 2006 preliminary report by an AmerGen consultant, George Licina. AmerGen produced this document through the mandatory disclosure process on January 26, 2007. Mr. Licina completed his analysis and produced a final report, dated January 4, 2007, that supersedes Exhibit ANC-7 (the preliminary report cited by Citizens). The final report is appended to this Answer as AmerGen Exhibit 4; AmerGen collected this document during its January 2007 mandatory disclosure searches, and disclosed it to Citizens in its February 15, 2007 mandatory disclosure update.

Mr. Licina's final report explains that differences in the measurement techniques implemented in 1992 and 2006 introduced a bias in the 2006 thickness measurements that would account for the uniform differences between the two sets of data. AmerGen Exhibit 4, at 5-1 to -2. The report concludes that "the actual mean value of the difference between 2006 and 1992 thickness measurements is zero or a value very near zero . . . ." *Id.* at 5-2.[14] Also, because the 2006 visual inspections of the epoxy coating on the exterior of the drywell shell identified the coating to be in good condition, certain measurements that appeared to show large thickness losses, such as 0.070" or more, could only be statistical outliers that must be ignored. *Id.* at 6-1.

Thus, Citizens' reliance on Mr. Licina's November 2006 preliminary analysis is inappropriate to meet the requirements of 10 C.F.R § 2.309(f)(1)(vi), as they have once

---

[14] ACRS Member Dr. J. Sam Armijo concurred with this conclusion in comments addressed to counsel for Citizens at the February 1 meeting. "Independently, I did something very similar to what Mr. Licina did, and . . . I saw the same phenomena . . . . [T]here are systematic changes, systematic bias and there was no way I could conclude that there was continuing corrosion, that the most reasonable interpretation of the data is that the corrosion had been arrested since 1992." ACRS Feb. 1 Tr. at 262.

again failed to identify a dispute of material fact related to the latest UT results.

(d) AR 00461639: As discussed in Section B, above, AmerGen has resolved the issues identified in this AR, and produced this resolution to Citizens on December 12, 2006. Accordingly, this document cannot provide an adequate basis for the proposed new contention under 10 C.F.R § 2.309(f)(1) because it tells only half the story.

The revised calculation required by this AR has been completed, and it demonstrates that the 1992 UT data met ASME Code requirements in 1992. *See* Exhibit 3, at 4. Furthermore, the UT data collected during the 2006 outage demonstrate that the monitored areas of the drywell shell have experienced no observable corrosion since 1992. *See* Exhibit 4, at 6-2 ("Corrosion rate, as defined by physical observation of coating condition and a thorough analysis of the 106 thickness measurements done in both 1992 and 2006 confirms that the apparent corrosion over that 14 year period is essentially nil.").

Therefore, Citizens also have failed to identify a dispute of material fact related to this AR.

III. CONCLUSION

Citizens' new late-filed contention fails to meet the procedural requirements for admission and has no substantive merit. Yet again, Citizens have filed a new contention based on "unsupported arguments and failures to address facts obviously necessary to provide a foundation for a proposed contention." Feb. 9 Order at 22 (J. Abramson,

concurring). Because it lacks an adequate basis and fails to meet the requirements of 10 C.F.R. §§ 2.309(c), (f)(1), and (f)(2), it should be dismissed by the Board in its entirety.

Respectfully submitted,

Donald J. Silverman, Esq.
Kathryn M. Sutton, Esq.
Alex S. Polonsky, Esq.
MORGAN, LEWIS & BOCKIUS, LLP
1111 Pennsylvania Avenue, N.W.
Washington, DC 20004
Phone: (202) 739-5502
E-mail: dsilverman@morganlewis.com
E-mail: ksutton@morganlewis.com
E-mail: apolonsky@morganlewis.com

J. Bradley Fewell
Associate General Counsel
Exelon Corporation
4300 Warrenville Road
Warrenville, IL 60555
Phone: (630) 657-3769
E-mail: Bradley.Fewell@exeloncorp.com

COUNSEL FOR
AMERGEN ENERGY COMPANY, LLC

Dated in Washington, D.C.
this 5th day of March 2007

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	March 5, 2007
AmerGen Energy Company, LLC	)	Docket No. 50-219
(License Renewal for Oyster Creek Nuclear Generating Station)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "AmerGen's Answer Opposing Citizens' February 6, 2007 Motion for Leave to Add a Contention and Motion to Add a Contention" were served this day upon the persons listed below, by E-mail and first class mail, unless otherwise noted.

Secretary of the Commission*
U.S. Nuclear Regulatory Commission
Attn: Rulemakings and Adjudications Staff
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852-2738
(E-mail: HEARINGDOCKET@nrc.gov)

Administrative Judge
E. Roy Hawkens, Chair
Atomic Safety and Licensing Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
(E-mail: erh@nrc.gov)

Administrative Judge
Paul B. Abramson
Atomic Safety and Licensing Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
(E-mail: pba@nrc.gov)

Administrative Judge
Anthony J. Baratta
Atomic Safety and Licensing Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
(E-mail: ajb5@nrc.gov)

John A. Covino
Ellen Barney Balint
Valerie Anne Gray
Caroline Stahl
Division of Law
Environmental Permitting and Counseling Section
P.O. Box 093
Hughes Justice Complex
Trenton, NJ 08625
(E-mail: john.covino@dol.lps.state.nj.us)
(E-mail: Ellen.Balint@lps.state.nj.us)
(E-mail: Valerie.Gray@dol.lps.state.nj.us)
(E-mail: Caroline.Stahl@lps.state.nj.us)

Office of Commission Appellate
Adjudication**
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Richard Webster
Rutgers Environmental Law Clinic
123 Washington Street
Newark, NJ 07102-5695
(E-mail: rwebster@kinoy.rutgers.edu)

Suzanne Leta
NJPIRG
11 N. Willow Street
Trenton, NJ 08608
(E-mail: sleta@njpirg.org)

Paul Gunter
Nuclear Information and Resource Service
1424 16th Street, NW
Suite 404
Washington, DC 20036
(E-mail: pgunter@nirs.org)

Mitzi A. Young
Steven C. Hamrick
Jody C. Martin
Office of the General Counsel, 0-15D21
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
(E-mail: may@nrc.gov)
(E-mail: sch1@nrc.gov)
(E-mail: jcm5@nrc.gov)

Debra Wolf
Law Clerk
Atomic Safety and Licensing Board
Mail Stop: T-3F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
(E-mail: daw1@nrc.gov)

* Original and 2 copies
** First Class Mail only

Raphael P. Kuyler