

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

E. Roy Hawkens, Chairman
Dr. Paul B. Abramson
Dr. Anthony J. Baratta

In the Matter of

AMERGEN ENERGY COMPANY, LLC

(License Renewal for Oyster Creek Nuclear
Generating Station)

Docket No. 50-0219-LR

ASLBP No. 06-844-01-LR

September 12, 2007

MEMORANDUM AND ORDER
(Hearing Directives)

On September 5, 2007, the Licensing Board in the above-captioned proceeding convened a prehearing telephonic conference with counsel for the parties to discuss matters relating to the upcoming evidentiary hearing. This Memorandum and Order sets forth in greater detail certain items discussed during that call.

A. Requiring Citizens To Expunge Certain Material From Prefiled Exhibits

On July 27, 2007, AmerGen and the NRC Staff each filed motions in limine seeking to strike from the record certain portions of Citizens' initial written statement of position, and the prefiled direct testimony of Dr. Rudolf H. Hausler. Subsequently, on August 9, the Board issued a Memorandum and Order indicating that we would "refrain from actually expunging [any] irrelevant material from the record[, r]ather, to the extent we conclude that material is irrelevant or otherwise inadmissible, we will accord it no weight" (Licensing Board Memorandum and Order (Ruling on Motions in Limine and Motion for Clarification) at 2 (Aug. 9, 2007) (unpublished) [hereinafter August 9 Order]). Our decision not to expunge the inadmissible material from the administrative record does not mean, however, that it may be admitted into the

evidentiary record.¹ Accordingly, consistent with instructions provided to Citizens by the Board during the prehearing telephonic conference call of September 5 (Tr. at 173-74), and pursuant to the rationale in our August 9 Order, Citizens are hereby directed to redact from the prefiled testimony of Dr. Hausler and his accompanying Attachments 3 and 4 the language indicated in Attachment A to this Order.² Citizens must either remove the offending language from the testimony and Attachments, or otherwise black out the language such that it cannot be read.

B. Opening And Closing Statements

Counsel for AmerGen and Citizens will be allowed fifteen (15) minutes each to make an opening statement. AmerGen will present its opening first, followed by Citizens. Counsel for AmerGen and Citizens will be allowed twenty (20) minutes each to make a closing statement. Citizens will present their closing first, followed by AmerGen.³

C. Witness Panels

The Licensing Board will examine witnesses from all three parties in panels in accordance with the panel topics listed below (which generally track the panel topics proposed by AmerGen in its prefiled direct testimony):

Panel Topic 1: Drywell Physical Structure, History, and Commitments

Panel Topic 2: Acceptance Criteria

Panel Topic 3: Available Margin

Panel Topic 4: Sources of Water

¹ “The reason such material is not purged from the record is that it could become relevant in a subsequent appeal” (Licensing Board Memorandum and Order (Denying AmerGen’s Motion for Summary Disposition) at 6 n.9 (June 19, 2007) (unpublished)).

² Because Citizens’ initial written statement of position is not evidence in this proceeding and will not be submitted as an exhibit, to the extent statements made therein are irrelevant or otherwise inadmissible, we will accord those statements whatever weight they merit and will not require them to be deleted.

³ The NRC Staff indicated it would not be making an opening or closing statement (Tr. at 132).

Panel Topic 5: The Epoxy Coating

Panel Topic 6: Future Corrosion

Panel Topic 7: Additional Questions

At present, the Board anticipates covering Panel Topics 1 - 3 on Monday, September 24, and Panel Topics 4 - 7 on Tuesday, September 25. The Board intends to reserve the morning of Wednesday, September 26 to address any remaining questions and to allow for closing arguments. As the Board previously has advised, however, the parties should have their witnesses available for *all* the panel topics *throughout* the hearing.

D. Submission Of Motions To Strike Sur-Rebuttal Testimony

If a party intends to submit a motion in limine regarding the sur-rebuttal testimony due on September 14, such a motion must be filed and received by the Licensing Board and the other parties no later than 12:00 P.M. on Tuesday, September 18. Any response to such a motion must be filed no later than 5:00 P.M. on Wednesday, September 19.

E. Submission Of Corrections To The Transcript

At the conclusion of the evidentiary hearing, the Licensing Board will instruct the parties as to the schedule for submission of transcript corrections.

F. Topic Areas To Be Discussed In Greater Detail At Evidentiary Hearing

The parties shall be prepared to discuss in depth all of the topics addressed in their testimony and briefs. In addition, the Board intends to explore in greater detail the topics listed below.

1. In Question No. 11 of our August 9 Order, we directed the parties to discuss the use of the term "reasonable assurance" under 10 C.F.R. § 54.29(a). See August 9 Order at 10-11. The Board intends to explore this issue further, particularly with the NRC Staff. The Staff's witnesses shall be prepared to explain, using specific examples, the "reasonable assurance" standard it has used in matters involving measurements of parameters that are at issue in license renewal proceedings, as well as in making determinations as to whether a licensee is in compliance with its Current Licensing Basis. This explanation should include all matters the Staff considers, such as the level of confidence in the data (i.e., 95/95), and conservatism in the threshold for satisfaction of the limit at issue.

The Staff should be prepared to provide a foundation for its method of determination.

To the extent AmerGen or Citizens believe they have an expert who can contribute relevant information on this matter, they should be prepared to have their expert testify.

2. The Board intends to probe further, with all three parties, the issue of uncertainty in the UT measurements – both systematic and statistical – which was raised in Question Nos. 4, 7, and 9 of our August 9 Order. See August 9 Order at 10. Only AmerGen provided an answer to Question Nos. 7 and 9 (AmerGen’s Prefiled Rebuttal Testimony, Part 3, at 7-9, 17 (Aug. 17, 2007); AmerGen Prefiled Exh. 25), while all three parties provided answers to Question No. 4. See AmerGen’s Prefiled Rebuttal Testimony, Part 3, at 11-14; NRC Staff Response to Initial Presentations and Response to Board Questions at 16-18 (Aug. 17, 2007); Citizens Prefiled Exh. 38, Memorandum from Dr. Rudolf H. Hausler (Aug. 16, 2007).

To the extent the NRC Staff or Citizens believe they have an expert who can contribute relevant information on matters raised by Question Nos. 7 and 9, they should be prepared to have their expert testify.

3. The parties should be prepared to discuss likely sites for future corrosion – if any – in light of the corrective actions taken by AmerGen. See, e.g., [AmerGen] Initial Statement of Position at 6-7 (July 20, 2007) (listing corrective actions taken to “protect[] the exterior of the drywell shell in the sand bed region from further corrosion”).
4. For the Board to make a determination as to whether AmerGen’s proposed frequency for conducting UT measurements will maintain an adequate safety margin, the Board must have a thorough understanding of the acceptance criteria against which the UT measurements are compared. In that context, AmerGen and the NRC Staff shall be prepared to explain:

(a) the manner in which the current general and localized acceptance criteria were derived by General Electric (“GE”); in particular, the distribution of thicknesses assumed in the GE analyses.

(b) the extent to which the general and localized acceptance criteria have changed over time and the reasons for those changes.

All parties shall be prepared to discuss how the current state of the drywell shell (i.e., its actual thicknesses distribution function, as measured) is properly considered against the particular geometrical pattern used by GE in its analyses.⁴

⁴ The Board emphasize that, although we may ask questions about the derivation of the acceptance criteria (or other topics that we previously have ruled are beyond the scope of this proceeding), our inquiries should *not* be construed as questioning the validity of the acceptance criteria. Nor should our inquiries about non-litigable topics be construed as rendering

5. AmerGen's Commitment 2 states that "[a] strippable coating will be applied to the reactor cavity liner . . . during periods when the reactor cavity is flooded," at the following Implementation Schedule: "*Refueling outages . . . during the period of extended operation*" (AmerGen Prefiled Exh. 10, Letter from Michael Gallagher, AmerGen, to NRC (Feb. 15, 2007), Encl. at 2).

AmerGen and the NRC Staff should be prepared to discuss whether the terms of this commitment extend to non-refueling outages (i.e., "forced" outages) that could arise during the period of extended operation. If yes, are there safety concerns that could arise during those forced outages that would prohibit or otherwise delay AmerGen's ability to apply the strippable coating.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD⁵

/RA/

E. Roy Hawkens, Chairman
ADMINISTRATIVE JUDGE

/RA by E. Roy Hawkens for:/

Dr. Paul B. Abramson
ADMINISTRATIVE JUDGE

/RA/

Dr. Anthony J. Baratta
ADMINISTRATIVE JUDGE

Rockville, Maryland
September 12, 2007

those topics litigable. Rather, the purpose of such questions is to acquire an understanding of the subject matter sufficient to enable us to accompany our decision with a fully explicated rationale. Because the Board is acutely aware of the limited scope of this proceeding, and because this hearing must end no later than noon on September 26 pursuant to the parties' request, we strongly urge the parties to be circumspect about raising objections to questions by the Board that seek to enhance the Board's understanding of related topics. See Tr. at 158-59.

⁵ Copies of this Memorandum and Order were sent this date by Internet e-mail to counsel for: (1) AmerGen; (2) Citizens; (3) the NRC Staff; and (4) New Jersey.

ATTACHMENT A

Document, Page No. (And Answer No., Or Location)	Language To Be Deleted Or Otherwise Redacted
<p>Prefiled Direct Testimony of Dr. Rudolf H. Hausler [hereinafter Direct Testimony] at 6; Answer 15(5) in its entirety</p>	<p>“5. The areas thinner than 0.736 inches in Bays 1 and 13 are grooves, not squares. It is unclear how to apply acceptance criteria that assume the corroded areas are squares to such grooves, which could have more effect on buckling capacity for the same area.”</p>
<p>Direct Testimony at 8; Answer 19 (final 3 sentences)</p>	<p>“A possible alternative would be to adapt real-time corrosion monitoring technology to measure corrosion of the drywell in real time. While I do not know of any nuclear power plant where this has been done, I do know of other successful applications of real-time corrosion measurement. There appears to be no technical reason why it could not be done.”</p>
<p>Direct Testimony at 8; Answer 20 (final sentence)</p>	<p>“In addition, the exterior measurements are the only measurements that allow us to estimate the areas that are corroded beyond acceptance thresholds.”</p>
<p>Direct Testimony, Att. 3 (Memorandum from Dr. Hausler (Apr. 25, 2007 - redacted version July 19, 2007) [hereinafter Attachment 3])</p>	<p>All redacted material indicated in the margins shall not appear in Exhibit B.</p>
<p>Att. 3, at 1; First bullet, second sentence</p>	<p>“It is shown that the UT monitoring locations (6 by 6 inch grids inside the drywell) as defined in 1989 are not representative of the corrosion, which had occurred in the sand bed region.”</p>
<p>Direct Testimony, Att. 4 (Memorandum from Dr. Hausler (July 18, 2007)) at 12-13; Final paragraph in its entirety</p>	<p>“Finally, the acceptance criteria have been based on modeling of square areas of corrosion less than 0.736 inches. However, in Bays 1, 15 and 19 the most corroded areas are actually long grooves. It is likely that such grooves have more effect on the stability of the drywell shell than square areas because the stresses cannot easily distribute around such areas. In the absence of further modeling of the effect of these shapes on stability, it is prudent to use conservative acceptance criteria to review these grooves, based on the modeling conducted to date, especially in Bays 1 and 15 where the average thickness is, at best, very close to 0.736 inches. Thus, the area below 0.736 inches should at least be smaller than one square foot, and thicker than 0.636 inches on average as it appears AmerGen also decided in 2006, after careful consideration.”</p>