

**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**

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| In the Matter of: |) | September 14, 2007 |
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| AmerGen Energy Company, LLC |) | |
| |) | Docket No. 50-219 |
| (License Renewal for Oyster Creek Nuclear |) | |
| Generating Station) |) | |
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**AMERGEN'S PRE-FILED SURREBUTTAL TESTIMONY
PART 4
SOURCES OF WATER**

I. WITNESS BACKGROUND

Q. 1: Please state your names and current titles. The Board knows that a description of your current responsibilities, background and professional experience was provided in Parts 1 and 4 of AmerGen's Pre-Filed Direct Testimony on July 20, 2007, so there is no need for you to repeat that information here.

A. 1: (JFO) My name is John F. O'Rourke. I am a Senior Project Manager, License Renewal, for Exelon, AmerGen Energy Company, LLC's ("AmerGen") parent company.

(AO) My name is Ahmed Ouaou. I am a registered Professional Engineer specializing in civil/structural design and an independent contractor.

(FHR) My name is Francis H. Ray. I am the Engineering Programs Manager at the Oyster Creek Nuclear Generating Station (“OCNGS”).

II. KNOWN SOURCES OF WATER IN THE SAND BED REGION

- Q. 2: Please summarize the purpose of this SurRebuttal Testimony and your conclusions.
- A. 2: (All) The purpose of this SurRebuttal Testimony is to respond to the information provided in Citizens’ Rebuttal Statement Regarding Relicensing of Oyster Creek Nuclear Generating Station (“Citizens’ Rebuttal Statement”) and in the Pre-Filed Rebuttal Testimony of Dr. Rudolf H. Hausler, regarding the sources of water in the sand bed region. Our overall conclusions, as explained below, are that Dr. Hausler and Citizens have presented no new information that would call into question our previous testimony on the sources of water in the sand bed region.
- Q. 3: Citizens have alleged that the reactor cavity concrete “trough is still subject to high temperatures that could cause the concrete to deteriorate and the condition of the trough was seen to be far from ideal in the most recent outage.” (Citizens’ Rebuttal Statement, page 20 (citing Citizens’ Exhs. 48 & 49)). How do you respond to this allegation?
- A. 3: (All) Citizens’ Exhibits provide no support for their conclusion that the condition of the trough was seen to be far from ideal in the “most recent” outage. The exhibits are from 1986 and 1996, not 2006. And there was no evidence of any defects in the trough drain during the 2006 refueling outage. The trough

functioned as designed by conveying any water to the trough drain and, thereby, preventing water from entering the external sand bed region.

Q. 4: Citizens allege that “[t]he plant could be forced into an outage that requires the fuel cavity to be flooded before there is any chance to apply measures to mitigate leaks in the cavity liner.” (Citizens’ Rebuttal Statement, page 19; Rebuttal Testimony, A.23, citing AmerGen Dir. Part 1, A.17). How do you respond to this allegation?

A. 4: (AO, JFO, FHR) As stated in Part 1 of this SurRebuttal Testimony, A.4, AmerGen has committed to apply a strippable coating “to the reactor cavity liner to prevent water intrusion between the drywell shield wall and the drywell shell *during periods when the reactor cavity is flooded.*” This includes forced outages. Further, as stated in AmerGen’s Direct Testimony, Part 4, A.6, “forced outages when the reactor cavity had to be filled with water are rare, and OCNGS has not experienced such an outage since at least 1990.”

Q. 5: Citizens allege that AmerGen has failed to account “for other forced outages that could lead to condensation on the exterior of the drywell surface.” (Citizens’ Rebuttal Statement, page 23; Rebuttal Testimony, A.23). How do you respond?

A. 5: (All) Citizens are wrong. Mr. Gordon’s analysis assumed that the exterior surface of an uncoated drywell shell is exposed to water for 30 days every two years. The average duration of OCNGS’s past four refueling outages, since AmerGen took over management, however, has been 26 days. Thus, Mr. Gordon’s analysis contains margin to account for potential drywell entry time during forced outages during which condensation is assumed to be present.

Nevertheless, such condensation remains highly speculative. Citizens fail to recognize that, as described in AmerGen's Direct Testimony, Part 4, A.16, there was no evidence of condensation on the exterior of the drywell shell in the sand bed region at any time during the 2006 outage, even while the drywell chillers were in operation. Thus, even if there is a theoretical potential for condensation, there is no evidence that it has actually taken place. Citizens present no evidence that it has, or even that it is likely. As a result, "the potential for condensation is entirely speculative." (AmerGen Dir. Part 4, A.17).

Q. 6: Do you have anything else to add?

A. 6: (All) Yes. In our Direct Testimony, A.9, we discussed the results of the reactor cavity liner leakage inspections during the 2006 refueling outage, and in our Direct Testimony, A.10, and Rebuttal Testimony, A.6, we discussed the results of the daily and quarterly poly bottle inspections from the Torus Room since March 2006. Relevant portions of the completion documentation for these inspections are attached as Applicant's Exhibits 50 through 56.

Q. 7: Does this conclude your testimony?

A. 7: (All) Yes.

In accordance with 28 U.S.C. § 1746, I state under penalty of perjury that the foregoing is true and correct:



John F. O'Rourke

9-12-2007

Date



Ahmed Ouaou

9/12/2007

Date

Francis H. Ray

Date

In accordance with 28 U.S.C. § 1746, I state under penalty of perjury that the foregoing is true and correct:

John F. O'Rourke

Date

Ahmed Ouaou

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Francis H. Ray

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