

RAS 14-95

DOCKETED
USNRC

January 26, 2009 (11:40am)

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VIA E-MAIL AND U.S. MAIL

January 26, 2009

The Honorable Dale E. Klein
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Re: In the Matter of AmerGen Energy Co., LLC (License Renewal for Oyster Creek
Nuclear Generating Station, Docket No. 50-219-LR

Dear Chairman Klein:

I am writing on behalf of my clients Nuclear Information and Resource Service, Inc., Jersey Shore Nuclear Watch, Inc., Grandmothers, Mothers and More for Energy Safety, New Jersey Public Interest Research Group, New Jersey Sierra Club, and the New Jersey Environmental Federation (collectively "Citizens"), who are parties to the ongoing relicensing proceeding for Oyster Creek Nuclear Generating Station ("Oyster Creek"). Because the Commission has tentatively scheduled an affirmation session regarding this proceeding on February 4, 2009 and because Exelon¹ wrote to you on January 22, 2009 regarding the submission of a three-dimensional structural analysis ("3D Analysis"), we are writing today to clarify certain issues that pertain to that analysis.

A brief review of the 3D Analysis reveals that it uses the very methodology that the Atomic Safety and Licensing Board (the "Board") found wanting in its October 29, 2008 decision (the "Decision").² To recap, on August 21, 2008, the Commission referred the question of whether Exelon's 3D Analysis would satisfy the requirements of

¹ Exelon Generation Company ("Exelon") has taken over the license from American Energy Co, LLC ("AmerGen").

² *E.g. Compare* Letter from Gallagher to NRC, dated January 22, 2009 at 2 to Decision at 13; *compare also* 3D Analysis at Figure 4-13 & Tables 3-3 to 3-4 to Diagram attached to Decision.

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Judge Baratta. After holding oral argument on the question and further briefing, the Board found that “AmerGen’s proposed approach to performing the structural analysis – *subject to the suggestions discussed in Part IV of this Memorandum* – match or bound the sensitivity analysis contemplated by Judge Baratta in his additional statement.”

Memorandum, In the Matter Of AmerGen Energy Co, LLC (License Renewal for Oyster Creek Nuclear Generating Station) (October 29, 2008) (the “Decision”) (emphasis added). Part IV of the Decision provided six detailed additional requirements designed to improve the modeling proposed AmerGen.

Despite the Decision, the modeling that Exelon has now presented to the Staff disregards the Board’s recommendations. Instead, it presents an analysis, which, by implication, the Board found would not “match or bound the sensitivity analysis contemplated by Judge Baratta in his additional statement.” To illustrate that implementing the recommendations of the Board could make a significant difference to the outcome of even the base-case analysis, one of the Board’s six recommendations concerned the appropriate capacity reduction factor. The Board recommended that this issue should be referred to Sandia National Laboratory (“Sandia”), Decision at 16-17, because Sandia disagreed with Exelon’s use of an enhanced capacity reduction factor for the refueling case. Citizens’ Ex. 60 at 77. However, in its latest analysis Exelon used an enhanced capacity reduction factor of 0.308 or larger for the refueling buckling case, 3D Analysis at Table 8-7, while Sandia previously used 0.207 for this parameter, because an enhancement was not justified. Citizens’ Ex. 60 at 77, 80. The submitted 3D Analysis finds a limiting safety factor of 3.54 for the refueling case. 3D Analysis at Table 8-7. Correcting this output for the difference in capacity reduction factor would reduce the limiting safety factor to 2.38. This is close to the factor of 2.0 required by the Current Licensing Basis (“CLB”) and the code and is of concern because of the large uncertainty in the inputs.

As the Board noted in the Decision, one other key issue in addition to the selection of an appropriate capacity reduction factor, is the need to have an adequate range of inputs for the sensitivity analysis. Here the Board specifically recommended a larger range of inputs than Exelon has actually used.³ Nonetheless, applying the same correction to the limiting margin that Exelon derived from its inadequate sensitivity analysis yields a limiting safety factor of only 2.17. It is likely that if the recommendations of the Board were followed and Sandia does not revise its previous assessment of the appropriate capacity reduction factor, the analysis would show that the safety factor during refueling could be below 2.0 in violation of the CLB.

³ Specifically, the Board recommended having two adjacent Bays reduced in thickness by 0.075 inches, Decision at 17, but Exelon has only reduced the thickness of one Bay by 0.05 inches. Letter from Gallagher to NRC, dated January 22, 2009 at 2.



A number of conclusions follow from this. First, the 3D Analysis confirms that we currently do not have reasonable assurance that drywell shell at Oyster Creek meets the code required safety factors, which are part of the CLB. It would therefore be inappropriate to move ahead with a licensing decision at this time. In addition, because this is an issue that relates to current safety as well as relicensing, it is essential to refer the capacity reduction factor issue to Sandia expeditiously. For similar reasons, the Commission could also decide to adopt the other recommendations of the Board and then instruct Exelon to immediately carry out a new analysis in accordance with the recommendations of the Board using both the capacity reduction factors. In this way the required modeling could be carried out concurrently with the review of the capacity reduction factor issue.

Finally, we also note that Exelon's submission letter covering the 3D Analysis claimed that it satisfied the requirements of the Advisory Committee on Reactor Safeguards ("ACRS"). However, as noted in the submission letter, the ACRS required "sensitivity studies to determine the degree to which uncertainties in size of thinned areas affect the code margins." Letter from ACRS to Chairman Klein, dated February 8, 2007. Contrary to Exelon's claims, the submitted 3D Analysis does not conform to the requirements of the ACRS, because it contains no such sensitivity study.

In summary, the submission of the 3D Analysis confirms that without further analysis we do not have reasonable assurance that the drywell at Oyster Creek meets the CLB. Prior to taking any decision on relicensing, the Commission should therefore require Exelon to do further modeling in accordance with the recommendations of the Board and the ACRS. Thank you for your consideration.⁴

Yours sincerely,

A handwritten signature in black ink, appearing to read "Rich W", is written over a long, sweeping horizontal line.

Richard Webster, Esq.

Enclosure

c.c. Service List
Jill Lipoti, New Jersey Department of Environmental Protection
Senator Frank R. Lautenberg
Congressman John Adler
Congressman Christopher Smith

⁴ As noted in the attached certificate of service, copies of this letter have been sent by e-mail or first class mail to all the parties in this proceeding.

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))	January 26, 2009
)	

CERTIFICATE OF SERVICE

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

I hereby certify that on January 26, 2009, I caused Citizens' Notification to be served via email and U.S. Postal Service (as indicated) on the following:

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Signed: /s/ 
Richard Webster

Dated: January 26, 2009