May 29, 2008

MEMORANDUM TO: Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: G. Edward Miller, Project Manager ***/ra/***
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION,
DRAFT REQUEST FOR ADDITIONAL INFORMATION
(TAC NO. MD8253)

The attached draft request for information (RAI) was transmitted on May 28, 2008, to Mr. Tom Loomis of AmerGen Energy Company, LLC (AmerGen). This information was transmitted to facilitate an upcoming conference call in order to clarify the licensee's amendment request for the Oyster Creek Nuclear Generating Station (Oyster Creek), dated March 10, 2008.

The proposed amendment would revise the Oyster Creek Technical Specifications by relocating the reactor vessel pressure-temperature limit curves to a licensee-controlled document.

The draft questions were sent to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. Additionally, review of the draft RAI would allow AmerGen to determine and agree upon a schedule to respond to the RAI. This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request.

Docket No. 50-219

Enclosure: Draft RAI

May 29, 2008

MEMORANDUM TO: Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: G. Edward Miller, Project Manager ***/ra/***
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Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION,
DRAFT REQUEST FOR ADDITIONAL INFORMATION
(TAC NO. MD7261)

The attached draft request for information (RAI) was transmitted on May 28, 2008, to Mr. Tom Loomis of AmerGen Energy Company, LLC (AmerGen). This information was transmitted to facilitate an upcoming conference call in order to clarify the licensee's amendment request for the Oyster Creek Nuclear Generating Station (Oyster Creek), dated March 10, 2008.

The proposed amendment would revise the Oyster Creek Technical Specifications by relocating the reactor vessel pressure-temperature limit curves to a licensee-controlled document.

The draft questions were sent to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. Additionally, review of the draft RAI would allow AmerGen to determine and agree upon a schedule to respond to the RAI. This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request.

Docket No. 50-219

Attachment: Draft RAI

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*Memorandum dated 5/27/2008, no significant changes
ACCESSION NO.: ML081490485

| OFFICE | LPI-2/PM | DCI/CVIB/BC |
|---|---|---|
| NAME | G. E. Miller | M. Mitchell* |
| DATE | 5/29/08 | 5/27/08 |

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DRAFT REQUEST FOR ADDITIONAL INFORMATION

REGARDING PROPOSED LICENSE AMENDMENT

RELOCATION OF PRESSURE-TEMPERATURE LIMITS CURVES

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

By letter dated March 10, 2008, AmerGen Energy Company, LLC (Amergen) submitted an amendment request for the Oyster Creek Nuclear Generating Station (Oyster Creek). The proposed amendment would revise the Oyster Creek Technical Specifications regarding secondary containment operability requirements during refueling.

The Nuclear Regulatory Commission staff has reviewed the information provided in support of the proposed amendment and finds that the following information is required to complete its review:

1) To verify that Oyster Creek reactor pressure vessel (RPV) pressure-temperature (P-T) limits in the proposed Pressure-Temperature Limits Report (PTLR) are results of correctly implementing the methodology of SIR-05-044-A, "Pressure-Temperature Limits Report Methodology for Boiling Water Reactors," the staff requests you:

   a) Provide an evaluation showing that you have performed analysis for the bottom head region and the non-beltline region in accordance with SIR-05-044-A and identify the portion of the proposed P-T limits (Figures 1 to 3 of the proposed PTLR are sufficient) that are limited by materials in these regions,

   b) Provide an evaluation for the small-diameter, drill-hole type instrument nozzle (e.g., water level nozzle) if it exists in your RPV beltline,

   c) Identify among the three methodologies (Page 2-13 of SIR-05-044-A) the one that you used to calculate thermal stress intensity factors for shell regions,

   d) Provide the temperature instrument uncertainty, the pressure instrument uncertainty, and the pressure head to account for the column of water in the RPV (Page 2-25 of SIR-05-044-A) so that the staff can assess the difference between the staff's calculated P-T limits and your proposed P-T limits, and

   e) Provide Reference 6.16 (a reference listed in the proposed PTLR), "Revised Calculation of P-T Limit Curves for the Oyster Creek Generating Station," dated February 26, 2008, to supplement the above requested specific information.

2) Page 7 of the PTLR mentioned that, "With respect to operating conditions, stress distributions were developed for a thermal shock of 450º F, which represents the maximum thermal shock for the feedwater nozzle during normal operating conditions." The only guideline in SIR-05-044-A regarding the thermal stress intensity factorcalculation for the

ENCLOSURE

feedwater nozzle is that the stress distribution should be extracted from a finite element model using the limiting normal/upset transient. Provide information regarding whether your feedwater nozzle analysis is plant-specific and how the 450º F thermal shock transient was selected and determined to be bounding.

3) Pages 7 and 8 provided some additional information regarding the finite element modeling of the feedwater nozzle for evaluating P-T limits for non-beltline materials that were not in SIR-05-044-A. Please justify the following:

   a) Use of a conversion factor of 3.2 times the cylinder radius to model the sphere (upper head), and

   b) Use of material properties at 325º F to bound the 100º F condition.