From:

PAUL M. BLANCH < PMBLANCH@ix.netcom.com>

To: Date: JZ <JAZWOL@aol.com> 8/11/96 7:18pm

Subject:

spent fuel pools

John This is in response to your letter to me dated 7/30/96

July 30, 1996

Mr. Paul M. Blanch 135 Hyde Road W. Hartford, CT 06117

SUBJECT: RESPONSE TO ELECTRONIC MAIL DATED MAY 24, 1996

Dear Mr. Blanch:

In a letter dated June 11, 1996, the staff forwarded a May 21, 1996, report on the recent survey of licensee core offload practices. In your electronic mail of May 24, 1996, you forwarded some issues regarding the survey.

In the recent survey, the staff sought to determine if core offload practices during refueling outages, including full core offload practices, were within the design bases, as described in each licensee's Updated Final Safety Analysis Reports (UFSAR) with regard to spent fuel pool cooling, criticality, and other safety aspects. As expected, the results of the survey showed considerable variation of practice with regard to core offload during refueling with most licensees continuing to practice full core offloading during refueling.

The survey also found that, while a substantial fraction of licensees were in compliance with their design bases for full core offloading, some licensees modified their licensing basis during the course of the survey, pursuant to 10 CFR 50.59 or 10 CFR 50.90, to ensure that their reload practices were consistent with their licensing basis. This provided the staff with an indication that past practices at those facilities may not have been consistent with the most recent licensing basis. The staff is proceeding to document the detailed findings for those facilities and will pursue enforcement action where appropriate.

With regard to Hope Creek, the staff continues to perform an in-depth review of the core offload schedule and practices associated with refueling outages three and four. The staff has determined that the Hope Creek licensing basis does not preclude the licensee from conducting full core offloads for any refueling outage. However, the staff is reviewing licensee's past practices to ensure that adequate provisions were made for the removal of decay heat from the spent fuel pool, including provisions to remove the larger decay heat load associated with a full core offload.

In your electronic mail, you forwarded a concern that the description of Hope Creek's routine core offload practice was not accurate. A table

(Table 1) was provided in the May 21, 1996, report which listed each plant along with a "routine" offload practice for each facility. The intent of the table was to provide senior NRC managers with insight regarding how widespread the practice of full core offloads is throughout the nuclear industry. With that it mind, the table clearly conveys the point that the practice of full core offloading is indeed widespread. The information for any one plant was based on a review of plant-specific outage history as well as non-binding statements of future intent made during the course of the survey. To the extent that any licensee can perform a full core offload during any refueling outage, provided they take the necessary steps to ensure it is performed within the bounds of the existing design basis, and to the extent that a licensee can change their intent regarding future outage practices at any time, the information in Table 1 was a snapshot of current practices and supports the important insight regarding the prevalence of full core offloads.

Regarding the comments on the survey provided by Messrs. Lochbaum and Prevatte and their impact on the survey, the staff provided a written response to Messrs. Lochbaum and Prevatte in a letter dated June 20, 1996 (Enclosure). The staff generally agreed with the premise of most of the comments provided by Messrs. Lochbaum and Prevatte and noted that additional information for a number of the issues would be pursued as appropriate.

In your May 24, 1996, electronic mail note, you forwarded comments on various spent fuel pool risk studies performed by the agency. Regarding nonconservatism contained in the NUREG-1353 study, you provide nothing to support your conclusion that NUREG-1353 represents "the extreme low-end of the consequence range." Regarding comments provided by Messrs. Lochbaum and Prevatte on the risk study of spent fuel pool cooling concerns at Susquehanna, the staff did consider all of the comments before issuing the June 19, 1995, final safety evaluation for the Susquehanna facility. Although the staff did not document a response to each comment in the final safety evaluation, the staff believes that risk assessment, as described in the final safety evaluation, provided valuable insight into the risk of loss of spent fuel pool cooling events at Susquehanna. Those conclusions include determinations that (1) loss of spent fuel pool cooling events represented a low safety significance challenge at Susquehanna and (2) certain modifications made by the Susquehanna licensee made a measurable improvement in plant safety. Based on the measurable improvement made at Susquehanna, the staff initiated the generic review of spent fuel storage pool issues. As mentioned in the staff's June 11, 1996, letter to you, the staff expects to make recommendations regarding generic spent fuel pool cooling issues to senior management by the end of July 1996. The staff will brief the full Commission on those recommendations at an open Commission meeting on August 1, 1996.

Based on the comments regarding the NRC in your May 24, 1996, electronic mail, your electronic mail will be referred to the Office of the Inspector General for whatever action is deemed appropriate.

If you have any additional comments or questions, please do not hesitate to contact me.

Sincerely

John Zwolinski, Deputy Director Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosure: Letter to D. Lochbaum and D. Prevatte from W. Russell, NRC, dated June 11, 1996

Paul:

Some thoughts (not limiting myself to twenty five words, unless duplicates don't count) on JZ's response to your e-mail on spent fuel pool issues:

- 1) Regarding the NRC's draft PRA for Susquehanna, the NRC's AEOD also challenges its soundness and has commissioned INEL to conduct a full peer review. According to the AEOD, the Susquehanna PRA did not conform to the NRC's guidelines on the construction and use of PRA.
- 2) Regarding Hope Creek's ongoing inquiry there have only been a handful of outages at Hope Creek. It has taken the NRC longer so far (and it ain't done yet) to determine what a "routine" refueling outage is at Hope Creek than it took to grant NU its amendment request at Millstone-1 last November. Why the different time zones?
- 3) Regarding the staff's response to comments on their spent fuel pool survey, we have frankly tired of the staff's "grading" our questions (i.e., those fellas raised some good points and their spelling was simply divine). We would much rather that they address our questions than compliment us on the depth and validity of our questions.
- 4) Regarding the accuracy of Hope Creek's entry in the spent fuel pool survey: (a) isn't it grand that the NRC boys do not have to comply with 10CFR50.9 for completeness and accuracy? and (b) Why is John so damn sure that Hope Creek is the only error on that list? Is it at all possible that EVERY plant normally does a full core offload in violation of its license? Wouldn't the Commission find that a more compelling statement than some licensees are thumbing their noses at the staff?

Sorry it took so long to respond, I was "vacationing"

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