

January 2, 2001

Mr. Mike Mulligan
P.O. Box 161
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Dear Mr. Mulligan:

This letter responds to your e-mail dated Thursday, November 30, 2000, regarding the consideration of future worst case climate changes in the license renewal review for the Edwin I. Hatch Nuclear Plant (HNP), Units 1 and 2.

Your main question appears to be whether we considered projections of future climate changes during the license renewal review (as opposed to historical data). The simple answer is no--only historical data was used with respect to the cooling water system in the staff's review of the HNP license renewal application.

However, beyond this basic question, your e-mail raises concerns related to two different aspects of this issue, i.e., the effects of the climate changes on the capabilities of the cooling water system, and the effects of cooling water system operation on the environment during extreme weather conditions. I will address these two aspects separately.

Effects of Climate Changes on the Cooling Water System

This issue relates to the safe operation of the plants in light of natural phenomena and is not, therefore, an environmental issue¹. The design of the cooling water system considered a range of weather and other conditions and this design basis is part of the plants' current licensing basis (i.e., part of the basis upon which the NRC licensed the plants). The current licensing basis would continue through the period of the renewed license. Therefore, the NRC staff did not re-analyze the cooling water system's design basis for license renewal.

If any change were to occur (e.g., a significant climate change) that called into question the licensing basis, mechanisms are in place to address it. The licensee would have to evaluate the problem and take action to correct it. Depending on the significance of the problem, the licensee may also be required to inform the NRC. The NRC can inspect the licensee's evaluation and corrective actions against regulatory and licensing requirements. This approach would be used during the term of the current license or during the term of a renewed license.

Environmental Impacts of the Cooling Water System

The NRC staff's draft findings concerning the environmental impacts associated with HNP's cooling system during the license renewal period were based on findings in the Generic

¹ When we discuss environmental issues, we are referring to impacts that plant operation has on the environment, not the other way around.

Mr. Mulligan

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Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS), NUREG 1437; the licensee's Environmental Report submitted as part of HNP's license renewal application; comments received from the public; consultations with other Federal, State, and local agencies; and the staff's own independent review. In its draft supplemental environmental impact statement for HNP, the staff concluded that the environmental impacts are small². Included in this review were the environmental impacts during the lowest river flow that has been recorded.

The specific concerns you raised were water quality impacts, dissolved oxygen concentrations, and ecological damage as a result of the heat and waste load. These issues were evaluated as having small impacts in the GEIS and determined to be applicable to all plants having the same type of cooling system. The conclusions in the GEIS were based on years of operating experience and are not expected to change during the license renewal period. In the absence of new and significant information which would alter the generic conclusions, the findings of the GEIS for these issues were incorporated by reference in the draft HNP supplemental environmental impact statement. A copy of the GEIS and of the draft HNP supplemental environmental impact statement are available on the NRC web page at <http://www.nrc.gov/NRC/REACTOR/LR/index.html>.

Summary

The staff did not use projections of worst case climate changes in assessing the cooling water system's ability to perform its intended function as part of the license renewal review. The design basis of the plant was established at initial plant licensing. If future climate changes were to place the plant outside of its current licensing bases, there are mechanisms in place that would require corrective actions to be taken. Finally, in its draft supplemental environmental impact statement the staff determined that the impacts on the environment from the cooling water system are small.

I hope that this information addresses your immediate concerns. A response to your comments will also be provided in the final environmental impact statement for HNP license renewal. If you would like to provide additional information or have additional questions, please do not hesitate to contact me at 301-415-2828.

Sincerely,

/RA/ Signed by A. Kugler

Andrew Kugler, Senior Project Manager
Generic Issues, Environmental, Financial,
and Rulemaking Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket Numbers: 50-321, 50-366
cc: see attached page

² In this context, the term "small" is defined as follows: Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.

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g:/RGEB/Hatch/DSEIS Public Comments/mulligan-response.wpd

*See previous concurrence

OFFICE	RGEB:PM	RGEB:SC	OGC	RGEB:BC
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DATE	12/20/00	12/20/00	12/14/00	01/02/01

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Docket File

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