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Director
Office of Nuclear Reactor Regulation
U S Nuclear Regulatory Commission
Washington, DC 20555

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42
50-306 DPR-60

Supplement No. 1 to License Amendment Request dated April 10, 1984
Revision to Main Control Room Habitability Study

In letters dated January 30, 1981 and July 20, 1981 Northern States Power Company submitted for NRC review the control room habitability study for Prairie Island required by NUREG-0737, Item III.D.3.4. This study, performed by Bechtel Power Corporation, was subsequently approved by the Commission in a Safety Evaluation Report dated April 9, 1982.

The original Prairie Island control room habitability study concluded that toxic gas monitors would be required for detection of Chlorine, Ammonia, Hydrochloric acid and Formaldehyde. In response to these findings, instrumentation for detection of these four chemicals and isolation of the control room upon detection, were installed at Prairie Island. Additionally, per the requirements of NUREG-0737, proposed Technical Specifications for these toxic gas detection systems were submitted to the Commission. The Chlorine detection system Technical Specification has been issued and the Technical Specifications for the remainder of the toxic gas detection system are presently under review by the Commission.

In the time since the original study was performed, new methodology for the estimation of incapacitation times following exposures to toxic gases has become available. This new methodology was utilized by Bechtel Power Corporation during the performance of a control room habitability study for the Limerick Plant. The use of this methodology resulted in a significant reduction in the number of toxic chemicals that would have to be monitored.

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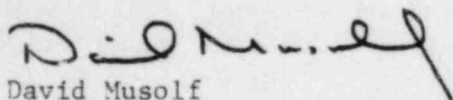
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Attached, for NRC review and approval, is a supplement to the original Prairie Island Control Room Habitability Study in which the new methodology discussed above has been utilized to re-evaluate the necessity of the existing toxic gas detection systems at Prairie Island. This supplemental study concludes that of the original four gases found to require a detection system, only the chlorine detection system is necessary for the requirements of NUREG-0737, Item III.D.3.4 to be met.

Based on the results of this study, Northern States Power feels that the Ammonia, Hydrochloric Acid and Formaldehyde detection systems are no longer required at Prairie Island and, subject to NRC approval, will no longer be utilized to satisfy the requirements of NUREG-0737, Item III.D.3.4. In their place, human detection along with administrative controls and training of control room personnel will be utilized to provide protection from these gases.

Because only the chlorine detection system is required to meet the Commission's requirements, we are withdrawing our proposed Toxic Gas Monitoring System Technical Specification (Item 2 in our License Amendment Request dated April 10, 1984) from your consideration. Because this letter and the attached report supplement our earlier application, no additional application fee is required.

If you have any questions on this letter or the attached study, please contact us.



David Musolf
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DMM/EFE/dab

cc: Regional Administrator-III
NRR Project Manager, NRC
Resident Inspector, NRC
G Charnoff

Attachment