

UNITED STATES NUCLEAR REGULATORY COMMISSIC * WASHINGTON, D. C. 20555

December 24, 1975

Docket N., 50-282

Mr. Peter L. Gove Executive Director Min.esota Pollution Control Agency 1935 West County Road - B2 Roceville, Minnesota 55113

Dear Mr. Gove:

8006270 463

This is in response to your letter dated December 1, 1975 in which you expressed concern over the release of radioactive halogens and particulates at the Prairie Island Unit 1 facility during the May 11, 1975 through August 10, 1975 interval. Your letter was received on December 10, 1975 and has been referred to me.

On June 26, 1975, reactor coolant leakage from No. 12 reactor coolant pump seal injection system was detected. The plant was brought to a shutdown condition and the containment air was processed through particulate and charcoal filters to minimize the release of radioactive effluents and to permit personnel entry into containment. Inspection revealed the presence of a crack in the seal injection piping. Further inspection also revealed a crack in a 3/4 pipe in the residual heat removal system. The total combined reactor coolant leakage rate into the containment was approximately 2.5 gallons per minute. The net result of this leakage was to increase the airborne halogen and cobalt-58 activity within containment above that normally present without piping defects. Consequently, the release of radioactive halogens and cobalt-58 was characterized as abnormal only in the context that it was higher than the normal release experienced at this facility. The total radioactivity with half lives greater than eight days released during the thirteen week interval was 0.0107 curs. The dose associated with this release at the nearest occurred residence was less than 1/100,000 of the requirements of 10 C 1 20 and is extremely low. This release did not violate the Prairie Island Unit 1 Technical Specifications and further verifies the effectiveness of the air cleanup. The Northern States Power Company has repaired the defective piping and will install pressure pulse suppressors in the seal injection piping to minimize recurrence of the piping failure. A pipe-hanger has also been installed in the residual heat removal system to reduce vibration of the 3/4 inch line. While defects such as described above do occur occasionally, they should not be characterized as routine and any associated maintenance and purging should be classified as extra-ordinary rather than routine in view of their infrequent occurrence.

You are correct in stating that the Northern States Power Company exceeded the thirty day interval allowed to notify the Nuclear Regulatory Commission of such an occurrence. The delay in notifying our staff was apparently due to a breakdown in communications within the Northern States Power Company. However, when the appropriate facility personnel recognized that this was a reportable occurrence they promptly notified our staff of this occurrence as described in their November 14, 1975 report. Our office of Inspection and Enforcement will shortly visit the Prairie Island Unit 1 site to review this matter and to determine if any additional enforcement action will be required. I believe that it is important to state that the current requirements as stated in the Prairie Island Technical Specifications are substantially more conservative than what would be permitted by our present guidelines in regard to the release o. radioactive gaseous effluents. While we are continuing to require stringent control of release of radioactive materials, we must also consider provisions for operational flexibility. This flexibility, compatible with considerations of the public health and safety, assures that the public is provided with a dependable source of power under unusual operating conditions that may temporarily result in releases higher than the design objective but less than the limits specified in 10 CFR 20.

Sincerely,

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Dennis L. Ziemann, Chief Operating Reactors Breach #2 Division of Reactor Licensing