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Regulatory

File Cy.

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

50-263

December 10, 1971

Dr Peter A Morris, Director
Division of Reactor Licensing
U S Atomic Energy Commission
Washington, DC 20545

Dear Dr Morris:

MONTICELLO NUCLEAR GENERATING PLANT E-5979
Supplemental Information - Change Request No. 2

Attached are three signed originals and nineteen conformed copies of Supplemental Information for Change Request No. 2, to operating License No. DPR-22.

Under separate cover, we are sending you 40 copies of the supplementing technical information on the following items:

- (1) Design basis for the filter and computation of shock wave attenuation in the recombiner system.
- (2) Verification that the dilution flow to the off-gas stack will be maintained constant.

At its October 27-28 meeting the Safety Audit Committee further reviewed the safety considerations related to the off-gas system modifications and concurred with the favorable recommendation of the plant Operations Committee.

In reply to your inquiry, the proposed modifications do not present significant hazards considerations, as defined in Section 50.59 (e), for the following reasons:

- (1) The worst case accident dose at the nearest boundary of the exclusion area is calculated to be less than 10 per cent of the 25 rem whole body dose set forth as a guide in 10 CFR 100.
- (2) The accident dose referred to above has been calculated based on the instantaneous release of all of the radioactive gases and particulates contained in the storage system together with inversion type meteorology. No clean-up systems or physical phenomenon such as radioisotope plate-out have been assumed to mitigate the effect of the accidental release.
- (3) Lethal and highly combustible gases are routinely stored at elevated pressures in a large number of industrial applications, and catastrophic failure of such storage systems is very rare. Based on this long-term



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Northern States Power Company
Minneapolis, Minnesota 55401
E.G. Ward

DATE OF DOCUMENT: 12-10-71		DATE RECEIVED 12-13-71		NO.: 5361
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TO: **Dr. Morris**

CLASSIF: **U** POST OFFICE

DESCRIPTION: (Must Be Unclassified)

Ltr trans the following:

ENCLOSURES:

- (1) Supplemental Information to Change Request No. 2 notarized 12-10-71. (3 Orig & 19 conf'd cys rec'd)
- (2) Supplemental Answers to DNL Questions. (40 cys rec'd)

REMARKS:

REFERRED TO	DATE	RECEIVED BY	DATE
Enuth	12/14/71		
W/9 cys for ACTION			
DISTRIBUTION:			
Reg Files			
AEC PDR			
Compliance (2)			
OCC, Rm P 506A			
Muntzing & Staff			
Skovholt			
N. Dube			
Thompson			
Boyd			
DTIE (Laughlin)			
NSIC (Buchanan)			

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U.S. ATOMIC ENERGY COMMISSION

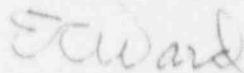
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industrial experience, the probability of a storage tank failing in such a way as to cause an instantaneous release is exceedingly small. However, to further reduce this failure probability, the high pressure storage system is designed, fabricated, and constructed to meet the stringent nuclear code; ASME Section III Class C (1968) for the tanks and Class 2 (1971) for the piping system. In addition, the gas storage building and supporting structures are designed to withstand the design basis earthquake (seismic Class I), the probable maximum flood, and the design basis tornado.

- (4) The storage of radioactive gas at elevated pressures has been previously reviewed by the Commission and judged to be acceptable for numerous pressurized water reactor system applications.

As we earlier informed members of your staff, we have begun site preparation work for this installation so that the benefits of the system can be available at an early date. Excavation work is now underway and construction of the required buildings will follow. We have made commitments for certain major pieces of equipment and are in the process of procuring other required material and equipment. Following your approval of the installation, certain equipment details will be finalized and installation of equipment will proceed.

Yours very truly,



E C Ward, Director
Engineering Vice Presidential Staff

Attachments

ECW/lb

Cc: D E Nelson
Gerald Charnoff