UNITED STATES NUCLEAR REGULATORY COMMISSION

3-11-76

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT Docket No. 50- 263

REQUEST FOR AMENDMENT TO
OPERATING LICENSE NO. DPR-22

(License Amendment Request Dated March 11, 1976)

Northern States Power Company, a Minnesota corporation, requests authorization for changes to the Technical Specifications as shown on the attachments labeled Exhibit A and Exhibit B. Exhibit A describes the proposed changes along with reasons for the change. Exhibit B is a set of Technical Specification pages incorporating the proposed changes.

This request contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

By L. J. Wachter
L J Wachter
Vice President, Power Production &
System Operation

On this 11th day of March, 1976, before me a notary public in and for said County, personally appeared L J Wachter, Vice President, Power Production & System Operation, and first being duly sworn acknowledged that he is authorized to execute this document in behalf of Northern States Power Company, that he knows the contents thereof and that to the best of his knowledge, information and belief, the statements made in it are true and that it is not interposed for delay.

Denise E. Branau

DENISE E. BRANAU
NOTARY PUBLIC — MINNESOTA
HENNEPIN COUNTY
My Commission Expires Oct. 16, 1981

EXHIBIT A

3-11-76

MONTICELLO NUCLEAR GENERATING PLANT
DOCKET NO. 50-263

LICENSE AMENDMENT REQUEST DATED MARCH 11, 1976

PROPOSED CHANGES TO THE TECHNICAL SPECIFICATIONS, APPENDIX A OF PROVISIONAL OPERATING LICENSE DPR-22

Pursuant to 10 CFR 50.59, the holders of Provisional Operating License DPR-22 hereby propose the following changes to the Appendix A Technical Specifications:

Table 3.7.1, Primary Containment Isolation

PROPOSED CHANGES

a. Change the normal position for the "Suppression Chamber Vent Bypass" valve from closed to open.

b. Aid a new Group 2 isolation valve, "Suppression Chamber to Drywell N_2 Recirculation" with a maximum permitted operating time of 60 seconds and a normal position of open.

REASON FOR CHANGES

Table 3.7.1 is a list of all primary containment isolation valves in lines two inches in diameter or larger. A new isolation valve, CV-7440, is being added in the 2-inch supression chamber vent bypass line as part of a system to maintain a constant differential pressure between the drywell and the torus. This valve and the present Suppression Chamber Vent Bypass Valve, CV-2384, will be open during operation of the system.

The proposed system (Figure 1) will remove nitrogen from the torus via CV-2384 and newly installed isolation valve CV-7440 using one of two blowers. The blower will discharge nitrogen to the drywell through two 1-inch isolation valves, CV-7437 and CV-7436, originally installed as part of a nitrogen pumpback system. Blower speed and recirculation flow will be manually adjusted to maintain the drywell pressure 1 psi above the torus pressure. The system, up to the second containment isolation valve in the suction and discharge lines, satisfies all design, quality assurance, and testability requirements set forth in 10 CFR 50.

SAFETY EVALUATION

In a letter dated February 27, 1976 from Mr. B. C. Rusche, Director, Office of Nuclear Reactor Regulation, USNRC, to Mr. L. O. Mayer, NSP, the Commission presented the results of their assessment of a proposal to maintain a 1-psi differential pressure between the Monticello drywell and suppression chamber. To facilitate this action, a nitrogen recirculation system has been designed. Use of this system will:

a. minimize containment venting

b. minimize consumption of nitrogen

We believe that the new system can be installed without prior approval of the Commission in accordance with the provisions of 10 CFR 50.59. An additional containment isolation valve, CV-7440, will be required, however, and must be listed in the Technical Specification Table of Containment Isolation Valves. In addition, an existing valve, CV-2384, will be normally open during plant operation instead of normally closed.

This system will utilize existing penetrations to the drywell and torus to pressurize the drywell. Containment isolation will be provided by double isolation control valves at both penetrations. The 1-inch line to the drywell already has two isolation valves which were originally installed for the N_2 Pumpback System.

A new 2-inch control valve, CV-7440, will be installed in series with CV-2384 to provide for double isolation of the supply line coming from the torus vent header. This valve will be controlled by the same circuitry that controls the outboard N_2 Pumpback isolation valve, CV-7437.

Since the isolation logic for the outboard isolation valves is separate from the inboard valves, the necessary separation criteria required for isolation valves in series is satisfied (Figure 2).

CV-7440 will be provided with limit switches which indicate if the valve is open or closed. These limit switches will be wired in conjunction with the limit switches of CV-7437 so that both valves must be closed to get the proper indication in the control room. The handswitch for CV-7437 will also control CV-7440.

SAFETY EVALUATION (continued)

CV-7440 will be a 2-inch Grinnel Air Motor Diaphragm Valve - 3225 which is a Type I nuclear grade valve. This valve is an air to open, spring to close valve and has a Grade "M" EPT Nordel diaphragm which is serviceable up to 300°F. This valve is designed to handle a line pressure of 108 psi at a temperature of 281°F which exceeds the torus design requirements of 41 psi and 281°F.

The piping installed on both lines (to the drywell and to the torus) will be installed in accordance with Bechtel Piping Specification M-40 Class HE as far as the seismic hanger and will utilize certified materials and approved welding procedures.

The blowers to be installed are leak-tight and are recommended by the supplier for this particular application in which leakage would consist of potentially low level radioactive gas.

The installation of the new control valve (CV-7440) and the new piping which will connect it to the 2" bypass line on the vent header will be an addition to the containment pressure boundary. The design of this piping and the seismic hangers required has been reviewed and approved by the Monticello Architect-Engineer.

Quality Assurance activities will be conducted in accordance with ASME Code Section III paragraph NA4000. Quality Assurance Documentation will be reviewed and approved by an authorized inspector from Hartford Steam Boiler Inspection and Insurance Company prior to the start of work and while it is in progress.

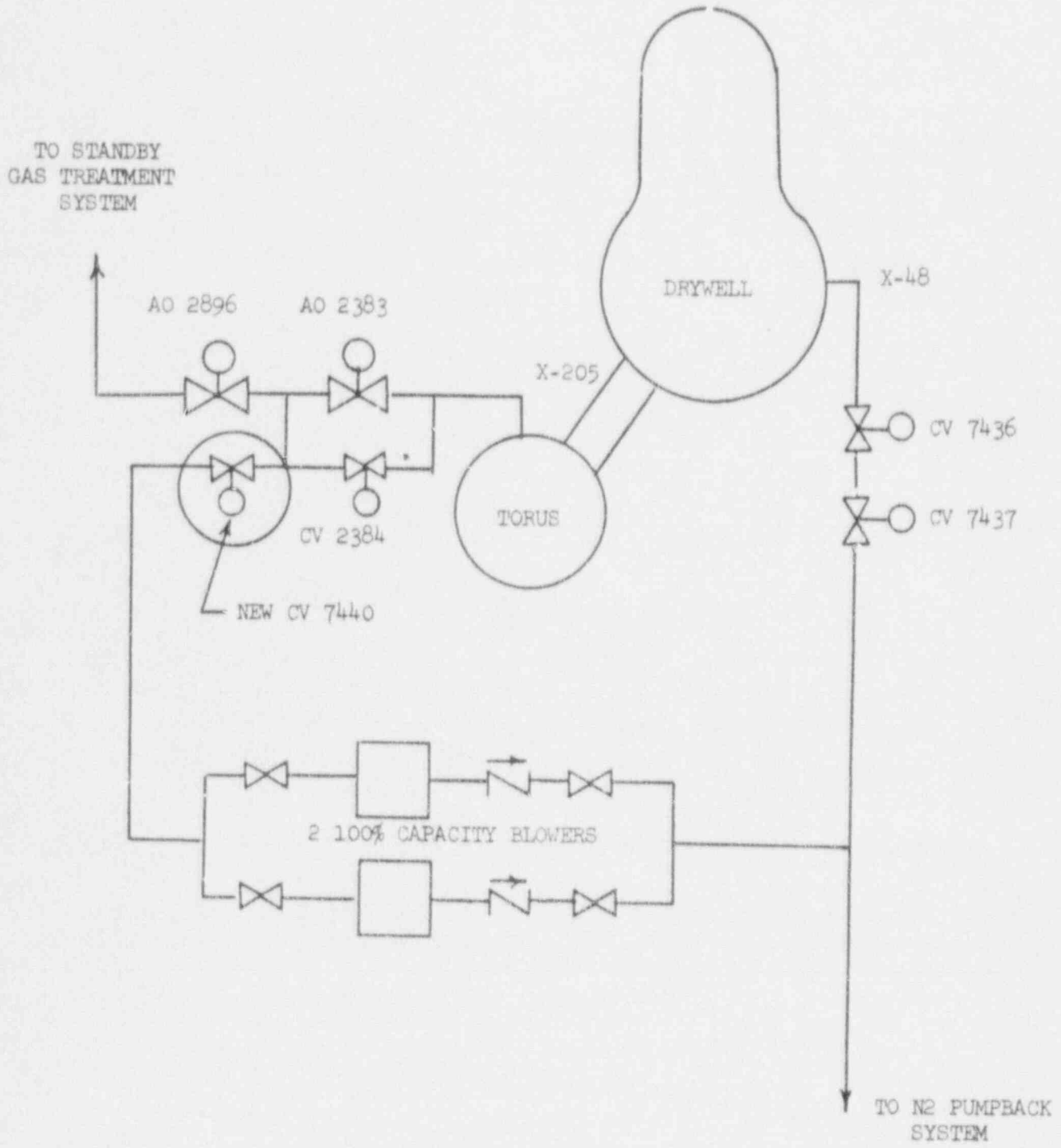

Figure 1. Propose Nitrogen Recirculation System.

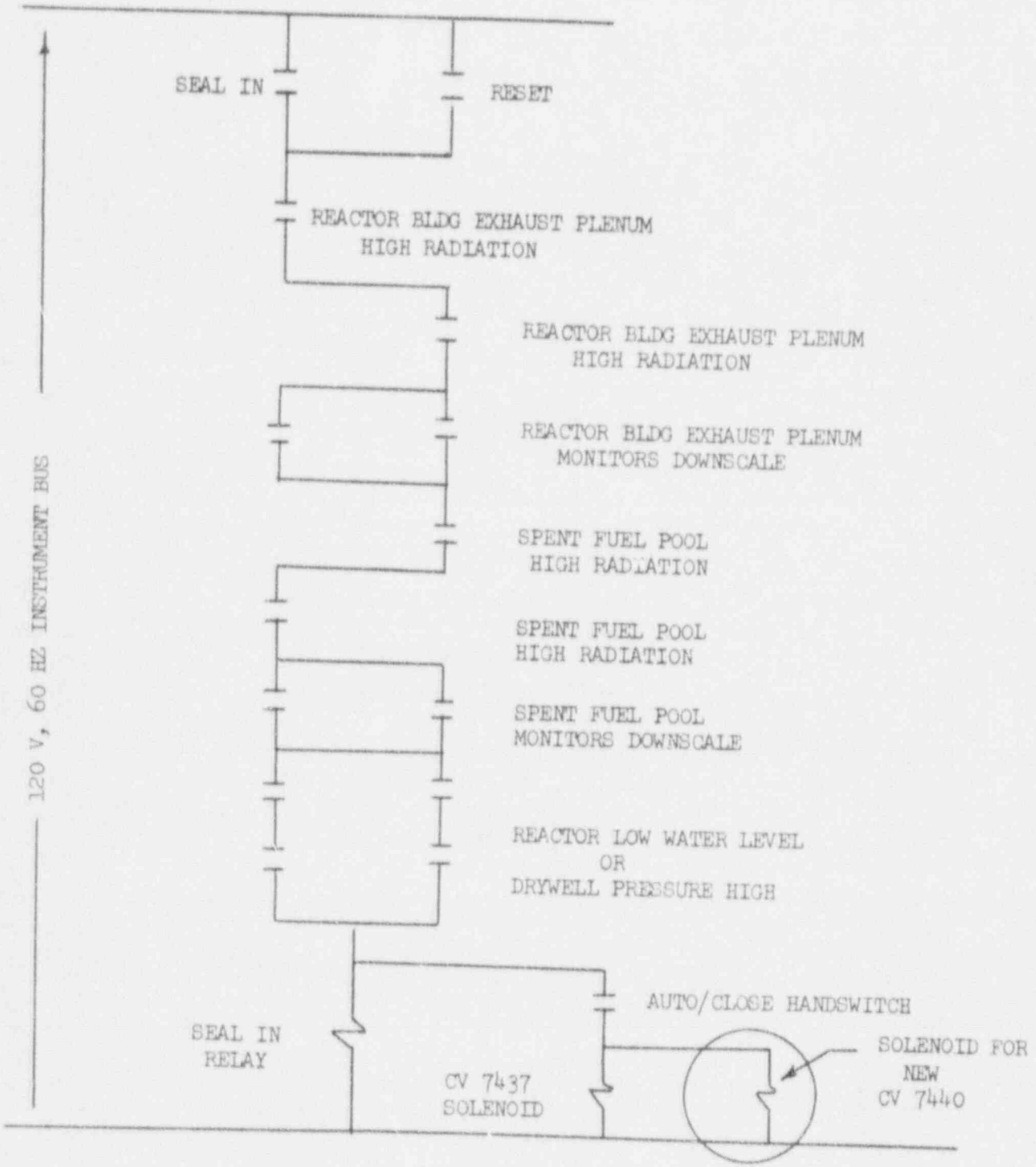

Figure 2. Group 2 Isolation Logic for Outboard Isolation Valves.

Enclosed with letter dated 3-11-76

LICENSE AMENDMENT REQUEST DATED MARCH 11, 1976

EXHIBIT B

This exhibit consists of the following pages revised or added to incorporate the proposed Technical Specification changes:

153

Also included are the following pages submitted as part of our License Amendment Request dated January 30, 1976 which are affected by installation of the N2 Recirculation System:

153
154H
154J