

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-263/OL-92-01

Docket No. 50-263

License No. DPR-22

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Facility Name: Monticello Nuclear Generating Plant

Examination Administered At: Monticello Nuclear Generating Plant
Monticello, Minnesota

Monticello Training Center
Monticello, Minnesota

Examination Conducted: March 16 - 20, 1992

RIII Examiners:

R. L. Doornbos

4-6-92
Date

T. L. Bettendorf, Pacific Northwest Laboratories

Chief Examiner:

M. N. Leach

4/6/92
Date

Approved By:

Michael E. Buckley
M. J. Jordan, Chief
Operator Licensing Section 1
Division of Reactor Safety

4/6/92
Date

Examination Summary:

Examination Administered March 16-20, 1992
(Report No. 50-263/OL-92-01)

A total of seven initial written and operating license examinations were administered to one Reactor Operator (RO), five Senior Reactor Operator-Upgrades (SRO-Us) and one Senior Reactor Operator-Instant (SRO-I). Examinations were administered in accordance with guidelines of NUREG 1021, Operator Licensing Examiner Standards, Revision 6, ES-301.

Results: All seven individuals successfully passed their respective initial license examinations.

The following is a summary of major strengths and weaknesses noted during examination administration:

STRENGTHS

- Response to annunciator alarms (details in Section 3).
- Knowledge of equipment and component location (details in Section 3).
- Pre-exam review (details in Section 4).

WEAKNESSES

- High Pressure Coolant Injection (HPCI) manual control (details in Section 3).
- Communications (Details in Section 3).
- Escort duties and RWP selection (Details in Section 3).
- Specific questions on the written examination (Details in Section 3).
- Lack of procedure index and insufficient administrative material (Details in Section 4).

REPORT DETAILS

1. Examiners

+*M. Leach, Chief Examiner, RIII NRC
+*R. Doornbos Examiner, RIII NRC
T. Bettendorf, Examiner, PNL

2. Persons Contacted

Facility Representatives

+ D. Antony, General Manager
*D. Alcott, Senior Instructor
+*W. Boehme, Shift Manager
+*M. Brant, General Superintendent Operations (Acting)
+ S. Cheen, Senior Technical Instructor, Prairie Island
+ W. Hill, Plant Manager
*D. Horgen, Simulator Supervisor
+*L. Nolan, Manager, Monticello Training Center
+*R. Uglow, Operations Training Supervisor
+ L. Waldinger, Director Power Supply Training
+*T. Wellumson, Operations Instructor

NRC Representatives

+*M. Jordan, Chief, Operator Licensing Section 1

+Denotes presence at the Management exit meeting on
March 20, 1992.

*Denotes presence at the Training exit meeting on
March 20, 1992.

3. OPERATING/WRITTEN EXAMINATION:

The following is a summary of generic strengths and weaknesses noted on the operating and written portions of the licensing examination. This information is being provided to the licensee for evaluation by their SAT based initial license training program. No licensee response is required.

Strengths

- During the dynamic simulator examination the operators consistently responded to annunciator alarms in a timely and accurate manner. Alarm prioritization and use of annunciator alarm response procedures was good.

- All candidates exhibited good knowledge of equipment and component locations in the simulator and in the plant.

Weaknesses

- During dynamic scenarios two out of two operators incorrectly operated HPCI in manual control. The candidates did not recognize the automatic high water level trip and assumed HPCI was inoperable. The operators dialed the manual control to zero, thereby making HPCI inoperable for the remainder of the scenario.
- During dynamic scenarios, candidates did not consistently use effective two-way communications, including repeat-backs and acknowledgements. This is contrary to the administrative guidance in 4AWI-04-07-05, "General Plant Operating Activities". Although no errors were attributed to inadequate communications, it is an area where Monticello differs from the remainder of the nuclear industry.
- Some candidates had considerable difficulty with the concurrent tasks of being an examinee and a visitor escort. This indicated a lack of familiarity with acting as a visitor escort. All candidates stated the examiners were to use a Radiation Work Permit which was not the correct one. The above factors tended to raise the candidates level of stress unnecessarily.
- Four questions on the written examination were answered incorrectly by at least three of the operators. These questions involved: those components which contribute to maintaining two thirds core coverage following a loss of coolant accident, emergency classification of a loss of both diesel generators during refueling, determination of the minimum pressure the plant may be reduced to during a cooldown, and the control rod drive hydraulic system design features which maintain constant drive water pressure.

4. TRAINING

Strengths

- The facility review of the written examination was excellent and appeared to alleviate inappropriate wording, terminology and acronyms not used at

Monticello. The facility personnel provided sound constructive criticism in order to improve the quality of the examination. In addition facility support for the dynamic scenarios was very good.

Weaknesses

- A complete procedure index was not provided as required by Enclosure 1 to the letter issued by Region III on November 4, 1991. In addition, the administrative reference material provided by the facility was insufficient to prepare the examination. Additional material was promptly provided as requested by the chief examiner.

5. GENERAL OBSERVATIONS

The following observations were made by the examiners while administering examinations:

- Security and Health Physics personnel were courteous and cooperative in assuring minimum delays when accessing the plant.
- Operations personnel were very cooperative and allowed examinations to continue in the Control Room without interruption.
- Plant cleanliness was good.
- Equipment condition was good.

6. ITEMS OF CONCERN

Two items of concern were raised by the examination team involving personnel safety: the handrail for the stairway in the Division I RHR room was a contaminated area boundary, and local operation of valve CV 1728 presented a personal safety hazard. Facility representatives addressed the first concern and are investigating measures to resolve the second.

7. EXIT MEETING

A pre-exit meeting with the Training Department, and a management exit meeting were conducted on March 20, 1992. Those attending these meetings are listed in Section 2 of this report.

The following items were discussed during the exit meeting:

- a. Operator and Training Department strengths and weaknesses noted during examination administration (Sections 3, and 4).
- b. The general observations made by the examiners during examination administration (Section 5).
- c. Items of concern identified by the examiners during the examination administration (Section 6).

The results of the examinations were not presented at the exit meeting. The licensee was informed that the results would be contained in the examination report which would be issued within approximately 30 working days.

ENCLOSURE 2
SIMULATION FACILITY REPORT

Facility Licensee: Northern States Power Company
Monticello Nuclear Generating Plant

Facility Licensee Docket No. 50-263

Operating Tests Administered On: March 17 - 19, 1992

During the conduct of the simulator portion of the operating tests, the following items were observed:

<u>ITEM</u>	<u>DESCRIPTION</u>
1. Rod block alarm	When a rod is selected in the next rod group an invalid rod block alarm occurs. This "nuisance" alarm is distracting to the operators and could cause a misdiagnosis in some scenarios.
2. AGAF adjustment	Adjustment of the APRM gain adjustment factors is time consuming and caused one scenario to be delayed and restarted.

These items were reviewed during the pre-exit meeting. No specific licensee response is required.