

*Maryann*

November 29, 1993

Docket No. 50-282

Northern States Power Company  
ATTN: Mr. D. D. Antony  
Vice President, Nuclear  
Generation  
414 Nicollet Mall  
Minneapolis, MN 55401

Dear Mr. Antony:

SUBJECT: REQUALIFICATION EXAMINATION REPORT

During the week of November 1, 1993, and on November 17, 1993, the NRC administered requalification examinations to employees of your organization who operate your Prairie Island Nuclear Generating Plant. At the conclusion of the examinations, any generic findings were discussed with those members of your staff identified in the enclosed report.

Two individuals were administered reactor operator (RO) examinations and two individuals were administered senior reactor operator (SRO) examinations. One RO failed the examination. All others passed. On November 17, 1993, following remedial training, an NRC administered requalification retake examination was given to the RO and he passed the examination.

In accordance with the criteria of NUREG-1021, Revision 7, Operator Licensing Examiner Standards, ES-601, a requalification training program evaluation rating was not assigned. The results of this examination will be incorporated with the results of future examinations to provide an evaluation at a later date.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this examination, please contact us.

Sincerely,

Original signed by Thomas M. Burdick (for)

Mark A. Ring, Chief  
Operations Branch

Enclosures:

- 1. Examination Report  
No. 50-282/OL-93-02(DRS)
- 2. Requalification Program  
Evaluation Report
- 3. Simulation Facility  
Fidelity Report

See Attached Distribution

RIII  
*FE*  
Ehrhardt/fe/jk/cg  
11/21/93

RIII  
*BA*  
Bailey  
11/29/93

RIII  
*B*  
Burdick  
11/29/93

RIII  
*K*  
Kobetz  
11/21/93

RIII  
*B*  
for Ring  
11/ /93

Distribution

cc w/enclosures:

E. L. Watzl, Site Manager,  
Prairie Island Site

M. Wadley, Plant Manager

T. Amundson, Training Manager

OC/LFDCB

M. Gamberoni, LPM, NRR

R. Gallo, OLB, NRR

Resident Inspector, RIII

Prairie Island

Resident Inspector, RIII

Monticello

John W. Ferman, Ph.D.,

Nuclear Engineer, MPCA

State Liaison Officer, MN

bcc w/enclosures: PUBLIC-IE42

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-282/OL-93-02

Docket No. 50-282

License No. DPR-42

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

Facility Name: Prairie Island Nuclear Generating Plant

Examination Administered At: Prairie Island Nuclear Generating Plant

Examination Conducted: Week of November 1, 1993, and on November 17, 1993

RIII Examiner: F. Ehrhardt  
F. Ehrhardt

11/29/93  
Date

Chief Examiner: M. Bailey  
M. Bailey

11/29/93  
Date

Approved By: T. Burdick  
T. Burdick, Chief  
Operator Licensing Section 2

11/29/93  
Date

Examination Summary

Examination administered during the week of November 1, 1993, and on November 17, 1993 (Report No. 50-282/OL-93-02(DRS))

Written and operating requalification (requal) examinations were administered to two (2) senior reactor operators (SROs) and two (2) reactor operators (ROs). One crew was evaluated during the simulator portion of the NRC examination. Additionally, a requalification retake examination was administered to one (1) reactor operator following remedial training.

Results: Three individuals and the crew satisfactorily passed all portions of the NRC requal examination. One RO failed the walkthrough (JPM) portion of the examination. In accordance with the criteria of NUREG-1021, Revision 7, Operator Licensing Examiner Standards, ES-601, a requalification training program evaluation rating was not assigned. The one RO passed his retake examination covering the walkthrough (JPM) portion.

The following is a summary of the strengths and weaknesses noted during the performance of this examination.

Strengths

- The examination material generated by the facility met the NRC examiner's standards with few exceptions.
- Training and support staff assistance was excellent.

Weaknesses

- Evaluator's ability to observe examinees under all situations (See Section 4).
- The requalification training sample plan did not meet the guidance in NUREG-1021 (See Section 4).
- Some steps within the Emergency Operating Procedures and Functional Recovery Guidelines do not provide explicit guidance for expected operator actions.

## REPORT DETAILS

### 1. Examiners

M. Bailey, NRC RIII, Chief Examiner  
F. Ehrhardt, NRC RIII

### 2. Persons Contacted

#### Facility

+M. Wadley, Plant Manager  
+J. Sorensen, General Superintendent of Plant Operations  
+T. Amundson, Training Manager  
\*+D. Reynolds, Superintendent of Operations Training  
+D. Herling, Shift Supervisor  
\*+M. Hall, Lead Operations Instructor  
+S. Gheen, Instructor  
\*+R. Pearson, Instructor  
+D. Smith, Instructor

#### U. S. Nuclear Regulatory Commission (NRC)

+T. Burdick, Section Chief, OLS 2, Region III  
+M. Dapas, Senior Resident Inspector

\*Denotes those present at the training staff exit meeting on November 3, 1993, and November 17, 1993.

+Denotes those present at the management exit meeting on November 4, 1993.

### 3. Regualification Training Program Observations

The following information is provided for evaluation by the licensee via their Systematic Approach to Training (SAT) program. No response is required.

#### a. Written Examination

##### Strength:

- Only minor changes to the written examination material was required to make it comply with the guidelines in NUREG-1021, Revision 7, Operator Licensing Examiner Standards, ES-602, and NUREG/BR-0122, Rev. 5, Examiners' Handbook for Developing Operator Licensing Written Examinations.

Weakness:

- Section A (Static Simulator) of the written examination covering the RO and SRO portions was identical. The SRO portion of the examination did not include unique questions that discriminate between the knowledge and abilities required of an SRO per ES-602. This was discussed with and corrected by the facility examiners prior to administration of the examination.

b. Job Performance Measures (JPMs)

Strength:

- Only minor changes to the JPM examination material was required to make it comply with the guidelines in NUREG-1021, Revision 7, Operator Licensing Examiner Standards, ES-602.

Weakness:

- Some steps were incorrectly designated as critical tasks while others were not recognized as critical. This was discussed with and corrected by the facility examiners prior to administration of the examination.

c. Dynamic Simulator Scenarios

Strength:

- Only minor changes to the dynamic and static simulator scenarios were required to make them comply with the guidelines in NUREG-1021, Revision 7, Operator Licensing Examiner Standards, ES-602.

Weakness:

- Dynamic simulator scenario guides did not contain event symptoms/cues per NUREG-1021, ES-604.

4. General Observations

a. Training

Strengths:

- The training staff provided excellent support during the examination process and worked well with the NRC examiners both during the preparatory and examination weeks.

- The variance between NRC and facility grading on the written and operating portions of the examination was minimal and conformed with existing standards.

Weaknesses:

- In a few instances, evaluators failed to properly monitor operator actions during dynamic scenarios by failing to follow their examinee behind the main control board when plant conditions required operator response. This deficiency was also noted in the previous requalification examination report (Report No. 50-282/OL-92-02).
- One evaluator displayed behavior that could be interpreted as agreement or cueing (e.g. saying "okay" and/or nodding his head following examinee responses or actions); however, this did not affect the examination results.
- The requalification training sample plan did not indicate which dynamic simulator scenarios were used for training or evaluation during the current requalification training cycle per NUREG-1021, ES-601. After questioning the facility examiners, it was determined that none of the scenarios used during this examination were previously used for training or evaluation.
- The requalification training sample plan did not identify topics or test areas that are appropriate only to ROs or only to SROs per NUREG-1021, ES-601.
- The examination as submitted was heavily weighted towards electrical topics relative to the training time spent on these topics as indicated in the sample plan. This was discussed with and corrected by the facility examiners prior to administration of the examination.
- Although not required, references cited within the test material (written, walkthrough, and simulator) did not include revision numbers. Thus, there was no easy method of ensuring that selected test items were current prior to use.

b. Operations, Security, and Radiation Protection

The NRC examiners received complete cooperation from security and health physics personnel. This expedited entrance to the plant, precluded any unnecessary delays in examination administration, and helped minimize examinee stress.

The examiners felt that certain steps in the Emergency Operating Procedures and Functional Recovery Guidelines were vague and did not provide explicit guidance to operators for meeting the requirements of the particular step. For example:

1E-3, STEAM GENERATOR TUBE RUPTURE, Rev. 9, step 13e., states:

"Dump steam to condenser from intact SG at maximum rate", but no value is given in the basis or operating documents regarding what constitutes an adequate rate.

1FR-S.1, RESPONSE TO NUCLEAR POWER GENERATION/ATWS, Rev. 6, step 4, states:

"Initiate Normal Boration Of RCS At Maximum Rate", but no value is given in the basis or operating documents regarding what constitutes an adequate rate.

1FR-S.1, RESPONSE TO NUCLEAR POWER GENERATION/ATWS, Rev. 6, step 7, states:

"Verify All Dilution Paths - ISOLATED", but a specific description of possible dilution pathways is not provided in the basis or operating documents.

As a result, the examination team could not establish specific, objective performance indicators for these actions. It appears that operator expectations in these instances are not well defined and are open to interpretation. Failure to develop specific expectations or failure to communicate them to the operating crews could lead to an inappropriate response during an event when these procedures must be used. Licensee management agreed to address this issue.

5. Simulator Observations

No simulator discrepancies were identified (see Enclosure 3).

6. Exit Meeting

Section 2 of this report is a list of those who attended the meeting. The following items were discussed:

- Strengths and weaknesses noted in this report.
- The general observations relating to the plant noted in Section 4.

The preliminary results of the examination were presented at the management exit meeting. The facility was informed that the final results would be documented in this report.

ENCLOSURE 2

REQUALIFICATION PROGRAM EVALUATION REPORT

Facility: Prairie island Nuclear Generating Plant

Examiners: R. Bailey, Chief Examiner  
F. Ehrhardt, Examiner

Date of Evaluation: Week of November 1, 1993

Areas Evaluated: X Written X Oral X Simulator

Examination Results:

	<u>RO</u> <u>Pass/Fail</u>	<u>SRO</u> <u>Pass/Fail</u>	<u>Total</u> <u>Pass/Fail</u>	<u>Evaluation</u> <u>(S or U)</u>
Written Exam:	2/0	2/0	4/0	S
Operating Exam:				
Walkthrough	1/1	2/0	3/1	S
Simulator	2/0	2/0	4/0	S
Evaluation of facility written examination grading:				S

Crew Examination Results:

	<u>Crew 1</u> <u>Pass/Fail</u>
<u>Operating Examination</u>	<u>Pass</u>

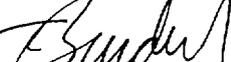
Overall Program Evaluation

Incomplete X

Submitted:

  
F. Ehrhardt  
Examiner  
11/29/93

Forwarded:

  
T. Burdick  
Section Chief  
11/29/93

Approved:

  
for M. Ring  
Branch Chief  
11/ /93

ENCLOSURE 3

SIMULATION FACILITY FIDELITY REPORT

Facility: Prairie Island Nuclear Generating Plant

Docket No. 50-282

Operating Tests Administered On: November 2, 1993

The following documents observations made by the NRC examination team. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required in response to these observations.

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

ITEM

DESCRIPTION

None.