U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-282/OL-89-02

Docket Nos. 50-282; 50-306 Licenses No. DPR-42; DPR-60

Licensee: Northern States Power Company
1660 Wakonade Drive West
Welch, MN 55089

Facility Name: Prairie Island Nuclear Generating Plant

Examination Administered At: Welch, MN

Examination Conducted: October 23-27, 1989

RIII Examiner: J. Hopkins 11/3/89 Date

Chief Examiner: D. Damon 11/2/89 Date

Approved By: T. Burdick 11/3/89 Date

Examination Summary

Examination administered during week of October 23, 1989 (Report No. 50-282/OL-89-02))
Examination given to six reactor operators and ten senior reactor operators. Results: All operators passed all sections of the NRC administered examinations. The licensee failed two senior reactor operators on the dynamic simulator portion of the examinations.

REPORT DETAILS

1. Examiners

*D. Damon
J. Hopkins
K. Parkinson
F. Victor

*Chief Examiner

2. Exit Meeting

On October 27, 1989, the examiners met with members of the facility staff to discuss the examination process. The following persons attended the meeting:

D. Reynolds, Operations Training Supervisor, NSP
M. Sellman, General Superintendent Plant Operations, NSP
L. Anderson, Shift Manager, NSP
J. Sorensen, Shift Manager, NSP
M. Hall, Instructor, NSP
D. Mendele, General Superintendent Engineer and Radiation Protection, NSP
T. Amundson, General Superintendent PITC, NSP
R. McGillic, Operations Training Supervisor - Monticello, NSP
P. Hartmann, Senior Resident Inspector, NRC
T. O'Conner, Resident Inspector, NRC
D. Damon, Chief Examiner, NRC
J. Hopkins, Examiner, NRC

During the meeting, preliminary NRC results and final facility results were discussed. Preliminary NRC results were that all individual examinees passed the exams, with one crew failure. Facility results were that all crews passed the exams, two individuals failed the simulator examinations, and all other sections of the exam were passed. The Chief Examiner explained that the NRC results were preliminary, and as such were subject to change based on further review of additional data being supplied by the facility staff.

The examiners outlined several observations that were made during the course of the examinations:

a. Procedure C20.5 contains guidance on the operations of the station 4160 volt distribution system. Portions of this procedure were written in such a general nature that three crews applied the procedural steps in three different ways, and each of the three different methods fell within the guidelines in the procedure. The facility staff has agreed to evaluate the need for changes in this procedure.

b. During performance of procedure E-1, "Loss of Reactor or Secondary Coolant," a determination is made concerning whether or not RCS pressure is stable or increasing. This criteria is used to determine the need to stop RHR pumps. Three crews applied the RCS pressure criteria in three different ways.

c. During response to an ATWS event, only one of three crews observed used all means available in the control room to attempt to trip the reactor, i.e., use of the second control room reactor trip switch. The facility staff has agreed to stress in training that there is more than one switch available to trip the reactor from the control room.

d. Two of four crews incorrectly determined the Emergency Action level for an ATWS event.

e. All crews were observed making good use of procedures and Technical Specifications.

f. Facility evaluators need to be more aware of providing inadvertent prompts to examinees when performing JPM evaluations. These inadvertent prompts consist of phrases such as "ok", "I'm satisfied", or "That's enough".

g. Evaluators need to be conscious of the cues that are provided in the JPM, and to consistently provide the appropriate cues to the examinee. Cues should not be given only when an examinee does not perform an action correctly, as the cue then becomes a prompt.

h. The facility should choose a single method to be used to determine when an examinee is finished answering JPM questions. This method should then be used by all facility evaluators. Several different methods were in use during this examination, and not all methods were equally effective.

3. Comparison of NRC and facility evaluation practices.

Facility evaluation of crew performance was consistent with NRC evaluation of the crew performance during dynamic simulator scenarios.

Facility evaluation of individual performance during dynamic simulator scenarios appeared to be stricter than NRC evaluation of individuals. This is considered satisfactory per ES-601.c.3.b.(2).

Facility grading of written exams was consistent with NRC grading.

Facility grading of JPM walkthroughs and JPM questions appeared to be more lenient than grading done by the NRC. The facility evaluators should take care to document subtle differences between examinee performance or response and the performance or response required for satisfactory performance.

Facility: Prairie Island Nuclear Generating Plant

Examiners: D. Damon, J. Hopkins, K. Parkinson, F. Victor

Dates of Evaluation: October 23 - 27, 1989

Areas Evaluated: XX Written XX Oral XX Simulator

Examination Results:

	RO Pass/Fail	SRO Pass/Fail	Total Pass/Fail	Evaluation (S, M, or U)
Written Examination	6/0	10/0	16/0	S
Operating Examination				
Oral	6/0	10/0	16/0	S
Simulator	6/0	10/0	16/0	S
Evaluation of facility written examination grading				S

Overall Program Evaluation

Satisfactory.

Facility grading of JPM questions appeared to be more lenient than NRC grading of the same questions.

Submitted:
Damon
Examiner

Forwarded:
Burdick
Section Chief

Approved:
for Wright
Branch Chief

SIMULATION FACILITY REPORT

Facility Licensee: Northern States Power

Facility Licensee Docket No. 50-282; 50-306

Operating Tests Administered At: Prairie Island Nuclear Generating Plant

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

ITEM	DESCRIPTION
1.	Following a reactor trip, the core cooling status tree should toggle from green to yellow based on whether or not core subcooling is greater than 20°F. The status tree was toggling to yellow with greater than 20° subcooling when it should remain green.
2.	Following a loss of transformer 1R and a loss of bus 15, letdown isolates for no apparent reason.
3.	Following a scenario for inadequate core cooling, core exit thermocouple temperatures continue to increase despite all operator action. CET temperatures should decrease when adequate core cooling is established.