November 2, 2001

Mr. Mano Nazar
Site Vice-President
Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT
INITIAL LICENSE EXAMINATION REPORT 50-282/01-301(DRS);
50-306/01-301(DRS)

Dear Mr. Nazar:

On September 21, 2001, the NRC completed initial operator licensing examinations at your Prairie Island Nuclear Generating Plant. The enclosed report presents the results of the examination.

The NRC administered the written examination on September 21, 2001, and the operating examination during the weeks of September 10 and September 17, 2001. One reactor operator and four senior reactor operator applicants were administered license examinations. The results of the examinations were finalized on October 18, 2001. All five applicants passed all sections of their respective examinations resulting in the issuance of one reactor operator license and four senior reactor operator licenses.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document control system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

We will gladly discuss any questions you have concerning this examination.

Sincerely,

/RA/

David E. Hills, Chief
Operations Branch
Division of Reactor Safety

Docket Nos. 50-282; 50-306
License Nos. DPR-42, DPR-60

Enclosures:
1. Operator Licensing Examination Report 50-282/01-301(DRS); 50-306/01-301(DRS)
2. Facility Comments and NRC Resolutions
3. Simulation Facility Report
4. Written Examinations and Answer Keys (RO & SRO)

cc w/encls 1, 2 & 3:
Plant Manager, Prairie Island
R. Anderson, Executive Vice President and Chief Nuclear Officer
Site Licensing Manager
Nuclear Asset Manager
J. Malcolm, Commissioner, Minnesota Department of Health
State Liaison Officer, State of Wisconsin
Tribal Council, Prairie Island Indian Community
J. Silberg, Esquire
Shawn, Pittman, Potts, and Trowbridge
A. Neblett, Assistant Attorney General
Office of the Attorney General
S. Bloom, Administrator
Goodhue County Courthouse
Commissioner, Minnesota Department of Commerce

cc w/encls 1, 2, 3 & 4: J. Jensen, Training Manager

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Commissioner, Minnesota Department
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-282; 50-306
License Nos:	DPR-42, DPR-60
Report No:	50-282/01-301(DRS); 50-306/01-301(DRS)
Licensee:	Nuclear Management Company, LLC
Facility:	Prairie Island Nuclear Generating Plant
Location:	1717 Wakonade Drive East Welch, MN 55089
Dates:	September 10 through September 21, 2001
Examiners:	Jay A. Hopkins, Chief Examiner (Exam Review) David L. Pelton, Chief Examiner (Exam Administration) Steven D. Rose, Examiner
Approved by:	David E. Hills, Chief Operations Branch Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000282-01-301(DRS), 05000306-01-301(DRS) on 09/10-09/21/2001, Nuclear Management Company, Prairie Island Nuclear Generating Plant, Units 1 and 2. The announced operator licensing initial examination was conducted by regional examiners in accordance with the guidance of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 8, Supplement 1.

Examination Summary

- One reactor operator applicant and four senior reactor operator applicants were administered written and operating examinations for initial operator licensing. All five applicants passed all sections of their respective examinations resulting in the issuance of one reactor operator license and four senior reactor operator licenses (Section 4OA5.1).

Report Details

4. OTHER ACTIVITIES (OA)

4OA5 Other

.1 Initial Licensing Examinations

a. Inspection Scope

The NRC examiners conducted announced operator licensing initial examinations during the weeks of September 10 and September 17, 2001. The facility's training staff used the guidance established in NUREG-1021, “Operator Licensing Examination Standards for Power Reactors,” Revision 8, Supplement 1, to prepare the examination outline and to develop the written and operating examinations. The NRC administered the written examination on September 21, 2000. The NRC examiners administered the operating examination the weeks of September 10 and September 17, 2001. One reactor operator applicant and four senior reactor operator applicants were examined.

b. Findings

Written Examination

The NRC examiners determined that the written examination, as originally submitted by the licensee, was within the range of acceptability expected for a proposed examination. Examination changes, agreed upon between the NRC and the licensee, were made according to NUREG-1021. The licensee provided comments on three written examination questions that were administered to the applicants. All three of these questions appeared on the reactor operator examination while only two of the questions appeared on the senior reactor operator examination. The licensee’s specific comments and the NRC’s resolution of those comments were included in Enclosure 2 to this report.

Operating Test

The NRC examiners determined that the operating test, as originally submitted by the licensee, was within the range of acceptability expected for a proposed examination. Examination changes agreed upon between the NRC and the licensee were made according to NUREG-1021.

Examination Results

One reactor operator applicant and four senior reactor operator applicants were administered written and operating examinations for initial operator licensing. All five applicants passed all sections of their respective examinations resulting in the issuance of one reactor operator license and four senior reactor operator licenses.

.2 Examination Security

a. Inspection Scope

The examiners reviewed and observed the licensee's implementation of examination security requirements during the examination preparation and administration.

b. Findings

The NRC examiners determined that the licensee's examination security practices associated with the development and administration of the operator license examinations were satisfactory.

4OA6 Meetings

Exit Meeting

The chief examiner presented the examination team's preliminary observations and findings to you and other members of the licensee management on September 21, 2001. The licensee acknowledged the observations and findings presented and did not identify any proprietary information.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

T. Allen, General Superintendent of Plant Operations
R. Gillespie, Operations Training Manager
D. Herling, Superintendent of Plant Operations
J. Jensen, Training Manager
J. Kempkes, Initial License Training Lead
J. Loesch, Initial License Exam Lead
M. Nazar, Site Vice President

NRC

C. Thomas, Prairie Island Resident Inspector

LIST OF ACRONYMS

AC	Alternating Current
ADAMS	Agency-Wide Document Access and Management System
CC	Component Cooling Water
DRS	Division of Reactor Safety
EOP	Emergency Operating Procedure
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
RCS	Reactor Coolant System
RO	Reactor Operator
RHR	Residual Heat Removal
SRO	Senior Reactor Operator
WOG	Westinghouse Owners Group

Facility Comments and NRC Resolutions

Written Examination Record Number 18 (RO examination question number 91, SRO examination question number 24):

Comment: The stem of the question provided various plant conditions including the reactor was in hot shutdown and the Unit had experienced a loss of all alternating current (AC) power. The question then asked "How would emergency procedure 1ECA-0.0, "Loss of Safeguards AC Power," be used in this situation?" The original correct answer ("c") stated to enter 1ECA-0.0 only if a safety injection signal occurs. Upon further review, the licensee believed that answer "a" (i.e., enter 1ECA-0.0 immediately upon verification of loss of power to buses 15 and 16 [safeguards buses]) was actually the correct answer. The licensee recommended that the NRC accept answer "a" as the correct answer.

NRC Resolution: The licensee's recommendation was accepted. The basis originally provided to the NRC to support answer "c" stated that 1ECA-0.0 was only to be entered from E-0, "Reactor Trip or Safety Injection," Step 3 if no safeguards bus was energized. The basis also stated that entry into E-0 occurs only on a reactor trip or safety injection, neither of which was given in the stem as an existing plant condition. The examiners reviewed 1ECA-0.0, SWI-O-0, "Conduct of Operations," Westinghouse Owners Group (WOG) Emergency Operating Procedure (EOP) Users Guide, and the Prairie Island EOP Users Guide. SWI-O-0 states that licensee management expects operators to take action to place the plant in a safe condition prior to reaching an automatic setpoint. Both the WOG and licensee's EOP Users Guides state that 1ECA-0.0 will be entered anytime a complete loss of power on the AC emergency [safeguards] buses takes place. The examiners also discussed operator expectations for 1ECA-0.0 entry with licensee management. Licensee management stated that operators should immediately implement 1ECA-0.0 based on: (1) the plant conditions described in the exam question; (2) the guidance provided in SWI-O-0; and (3) the guidance provided in the WOG EOP Users Guide and the licensee's EOP Users Guide. Based on the guidance in the above procedures and the discussion with licensee management, the examiners concluded that an operator should immediately enter ECA-0.0 upon identifying a loss of all AC power to the safeguards buses. Furthermore, the examiners concluded that original correct answer ("c") was incorrect. Answer "c" stated "Enter 1ECA-0.0 only if a safety injection signal occurs also." As discussed above, 1ECA-0.0 is to be entered immediately upon identifying that the safeguards buses are deenergized. The operator need not wait until a safety injection signal is generated before entering 1ECA-0.0.

Written Examination Record Number 28 (RO examination question number 46, SRO examination question number 48):

Comment: The stem of the question provided various plant conditions including a plant heatup was in progress, reactor coolant system (RCS) temperature was 230^0F, component cooling water (CC) system 11 surge tank level was increasing, and the CC system liquid radiation monitor was indicating normally. The question then asked "Which of the following actions should be taken to address this condition?" The original correct answer ("c") stated that the actions to be taken included verifying both CC system pumps were operating and *initiating* CC system flow through the 12 residual heat removal (RHR) heat exchanger, as directed by 1C1.2. Upon further review, the licensee believed answer "c" was not a correct answer because the station typically aligns the 12 RHR heat exchanger prior to plant heatup. Therefore, flow would normally have already been *initiated* through both heat exchangers, contrary to the required actions described in answer "c." The licensee recommended that the NRC delete this question due to there being no correct answer provided.

NRC Resolution: The licensee's recommendation was not accepted. The examiners reviewed 1C1.2, "Unit 1 Startup Procedure," 1C14, "Component Cooling System - Unit 1," and 1C15, "Residual Heat Removal System." These procedures do not specifically require that the 12 RHR heat exchanger be placed in service prior to heatup. Therefore, assuming the 12 RHR heat exchanger would have already been placed in service would not be a valid assumption under the given plant conditions. Procedure 1C1.2, Step 5.4.8, does state that when RCS temperature is greater than 225^0F, the operator is to verify that both CC pumps are operating and that there is CC system flow through both RHR heat exchangers. If, during this verification, it is identified that CC system flow was not initiated to the 12 RHR heat exchanger, it would be plausible to assume that there would be a finite amount of time involved in re-aligning the system. During system re-alignment, RCS temperature would continue to increase, possibly to 230^0F or higher, before system re-alignment was completed. Therefore, performance of this verification, even if initiated prior to reaching 225^0F, does not preclude the conditions on which the question is based. Direction provided to the applicants prior to taking the written examination (in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Appendix E) includes the statement "when answering a question, do not make assumptions regarding conditions that are not specified in the question unless they occur as a consequence of other conditions that are stated in the question." Based on the above, the examiners concluded that there was insufficient basis for the applicants to assume that both RHR heat exchangers were already in service. Therefore, answer "c" (i.e., verifying both CC system pumps were operating and initiating CC system flow through both RHR heat exchangers) was the correct answer to the question.

Written Examination Record Number 72 (RO examination question number 41):

Comment: The question asked which lights are lit on in-core seal table area radiation monitor (1R-07) when the operation selector switch is placed in the *check source* position. The original correct answer ("d") stated that orange (power), blue (channel test), and red (high alarm) lights are lit. Upon further review, the licensee believed that the correct answer should be that only orange and blue lights are lit, which corresponds to answer "b." The licensee believed that the red light would not be lit since the source check does not result in the monitor exceeding it's high radiation setpoint. The licensee recommended that the correct answer be changed from "d" to "b."

NRC Resolution: The licensee's recommendation was accepted. The examiners reviewed SP 1243, "Radiation Monitoring Quarterly Source Test," Revision 4; the Plant Computer Status Screen for the 1RM-07 High Radiation Setpoint; and the results of the performance of SP 1243 when performed in the simulator. Based on this review, the examiners concluded that when the operation selector switch on the 1R-07 radiation monitor is placed in the check source position, only the orange and blue lights are lit.

Enclosure 3

Simulation Facility Report

Facility Licensee: Prairie Island Nuclear Generating Plant, Units 1 and 2.

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

Operating Tests Administered: September 10 and September 17, 2001.

The following documents observations made by the NRC examination team during the initial operator license examination. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance with 10 CFR Part 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	

Enclosure 4

Written Examinations and Answer Keys (RO/SRO)

ADAMS Accession # for RO Exam: ML013040389
ADAMS Accession # for SRO Exam: ML013040398