

U. S. ATOMIC ENERGY COMMISSION  
REGION III  
DIVISION OF COMPLIANCE

Report of Inspection

CO Report No. 263/70-7

Licensee: Northern States Power Company  
Monticello Nuclear Generating Plant  
Construction Permit No. CPER-31  
Category B

Dates of Inspection: April 14-15, 1970

Dates of Previous Inspection: April 5 and 6, 1970

Inspected By: *C. D. Feierabend*  
C. D. Feierabend Principal Reactor Inspector 5-13-70  
*L. Denton*  
L. Denton Health Physicist

Reviewed By: *C. E. Jones for*  
H. D. Thornburg Senior Reactor Inspector 5-14-70

Proprietary Information: None

SUMMARY

A team inspection was performed to continue inspection of the health physics, environmental monitoring and radiation protection functions. It also included additional discussion and verification of implementation of the emergency plan and further discussion of resolution of deviations identified during the applicant's combined audit.

The following items of interest were noted:

1. Arrangement for final implementation of the emergency plans are progressing but are not yet complete. (Section II.A.)
2. Liquid waste handling systems are essentially complete, except for instrument calibration. (Section II.B.)
3. The reactor building ventilation exhaust stack monitor is being revised to provide additional sensitivity and particulate and halogen monitoring. (Section II.C.)

4. The main stack effluent monitoring equipment has been received and is essentially complete, with the exception of completing the monitor panel installation and calibration. (Section II.D.)
5. The air ejector off-gas monitoring system is installed and ready for calibration. (Section II.E.)
6. The main steam line monitor is not yet installed. (Section II.F.)
7. The standby gas treatment system is not yet complete. Some components have been delayed by the truckers strike. (Section II.G.)
8. A more sensitive discharge canal continuous monitor is being installed. (Section II.H.)
9. The solid radioactive waste handling facility is nearly complete. (Section II.I.)
10. Additional information was obtained concerning the Monticello DDR's (Section II.J.)

#### DETAILS

##### I. Scope of Inspection

##### A. Site Inspection

An announced team inspection was performed at the construction site on April 14-16, 1970, by Messrs. C. D. Feierabend, Reactor Inspector, and L. Denton, Health Physicist, CO:HQ. The purpose of the inspection was as identified above. The following personnel were contacted:

##### Northern States Power Company (NSP)

Mr. J. V. Sullivan, Principal Quality Assurance Representative  
Mr. C. Larson, Plant Superintendent (Operations)  
Mr. M. Clarity, Assistant Plant Superintendent (Operations)  
Mr. L. Eliason, Radiation Protection Engineer  
Mr. P. Bohn, Nuclear Plant Supervisor, Engineering

##### Monticello - Big Lake Hospital

Mr. C. W. Philbrook, Hospital Administrator

Scope of Inspection (continued)

B. Meeting in Offices of NSP

A meeting was held in the NSP corporate offices on April 16, 1970, to discuss the Monticello DDR's. H. D. Thornburg, Senior Reactor Inspector, represented CO:III. The following other persons were in attendance:

Northern States Power Company (NSP)

Mr. W. V. Jokela, Superintendent of QA  
Mr. K. Gelle, Nuclear Engineer

General Electric Company (GE)

Mr. L. Wolf, Project Engineer, APED

II. Results of Inspection

A. Emergency Plan

The Monticello Plant Emergency Plan was previously reviewed with the applicant during the CO inspections of March 2, 3, 12, and 13, 1970, at which time the documentation for the plan itself was considered satisfactory in meeting the FSAR commitments.<sup>1/</sup> However, at that time, the applicant had not completed arrangements for final implementation of the emergency plan and had not completed related documentation of the Operations Manual (OM) in the areas of radiation safety, casualty care, and abnormal procedures. Further information as to the readiness of the plan was obtained during this inspection and is presented below:

1. Radiation Safety Procedures

The individual sections of these procedures, which will be incorporated in the OM as Section E.2, have been written and are in various stages of review and approval by the Operations Committee. The content of the eleven sections of these procedures and their status of completion and approval are summarized in Exhibit I. The procedures, when viewed in conjunction with the Emergency Plan and Casualty Care Procedures, provide the essential elements identified in PI 2015.10.

<sup>1/</sup> CO Report No. 263/70-5.

Results of Inspection (continued)

2. Casualty Care

Casualty care procedures have been written and were approved by the Operations Committee on February 4, 1970, for incorporation in the QM as Section E.4. These procedures cover radiation casualty detection and handling in-plant, describe the hospital assistance plan operation, and provide pertinent information regarding medical treatment of radiation casualties. Mr. Eliason stated that the casualty plan had been discussed with Mr. C. W. Philbrook, Hospital Administrator, Monticello - Big Lake Community Hospital, Monticello, Minnesota, and that arrangements have been made with the hospital for patient care.

During the inspection, L. Denton and Mr. Eliason visited the hospital and were conducted on a tour by Mr. Philbrook of the facilities which would be made available in the event of an emergency. These facilities are located on the ground floor at the rear of the hospital at the emergency entrance and consist of the emergency treatment room and the nurses' lounge. Both of these rooms are in close proximity to x-ray and laboratory areas, all of which can be isolated from other hospital areas by appropriate barriers.

Mr. Philbrook stated that additional space on the second floor of the hospital above the emergency treatment area could be made available as needed. He stated that the basement below the emergency area is vacant and entry would be controlled and that the second floor above the area could be evacuated and controlled as necessary. Messrs. Philbrook and Eliason stated that all the necessary supplies and survey and monitoring equipment noted in the Casualty Care Plan would be stored in the emergency area for easy access. Mr. Philbrook reiterated to the inspector the hospital's previous commitment to NSP management to cooperate in establishing and carrying out the NSP Casualty Care Plan.

3. Training of Hospital Staff

While at the hospital and in the presence of the inspector, Mr. Eliason made arrangements with Mr. Philbrook for NSP Radiation Safety personnel to conduct morning (for the night shift) and evening (for the day shift) training sessions for the nursing staff during the latter part of April or early May 1970.

Results of Inspection (continued)

Mr. Eliason stated that he has contacted the two local ambulance services, Big Lake-Monticello Ambulance Service and Ambulance Service of Wright County, both of which are owner-driver services, and that neither had expressed any reluctance toward responding to an emergency at the site. Mr. Eliason further stated that he had discussed with one of the owner-drivers the precautions to be taken in transporting contaminated patients, namely to leave the handling of the injured to site personnel who will accompany the injured, to wear whatever protective clothing and personnel monitoring equipment that is provided by NSP, and that NSP will assume responsibility for decontamination of the ambulance. Mr. Eliason said that this was acceptable to the owner and that a similar discussion will be conducted with the other ambulance service owner-driver as soon as possible.

4. Training of the Plant Staff

Training was discussed briefly in a previous inspection report.<sup>2/</sup> Mr. Eliason stated that training of site personnel in the emergency plan is underway. Included in the training program for coping with injuries will be instruction in personnel decontamination and a 10-hour course in first aid. This training will be given to all radiation safety technicians, shift supervisors, and maintenance supervisors.

5. Emergency Surveying and Personnel Monitoring Equipment

Mr. Eliason stated that plans include placing certain surveying and monitoring equipment at strategic locations around the plant, at the two emergency assembly points and at the hospital as follows:

Hospital

- 10 - Victoreen Model 362 (indirect reading) pocket dosimeters
- 1 - Victoreen Minometer II dosimeter charger
- 1 - Victoreen Model 490 Thyac

<sup>2/</sup> Ibid.

Results of Inspection (continued)

Each Emergency Assembly Point

- 10 - Victoreen Model 362 pocket dosimeters
- 1 - Victoreen Minometer II dosimeter charger
- 1 - Victoreen Model 490 Thyac
- 1 - Staplex "Hi-Vol" air sampler with filters

Selected Plant Locations (as shown)

- 9 - ICN Model CP-4A "Cutie Pie" - distributed around the plant
- 5 - Staplex "Hi-Vol" air samplers - distributed around the plant
- 1 - Victoreen Model AGB-10KG-SR Radgun - Control Room

A number of additional portable alpha, beta-gamma, and neutron monitoring instruments are maintained in the Radiation Protection Office and Mr. Eliason stated that these could be reached in an emergency. They are available to the maintenance and shift supervisors. The emergency instruments are scheduled for calibration and maintenance on a 35-day frequency.

6. Emergency Transportation and Communications Equipment

The Control Room is equipped with a radio transmitter and receiver by which communications with outside organizations or emergency units can be maintained. NSP had four cars equipped with radios and nine trucks equipped with radios and portable power supplies for use in an emergency. Mr. Eliason stated that the Control Room and the radio-equipped cars and trucks can all converse with each other, and the Control Room can monitor and converse with external units such as the State Police and the Sheriff's Office and any other such organizations with radio transmitter-receiver equipment.

7. Emergency Plan Arrangements with Local and State Officials

Mr. Larson, Plant Superintendent, stated that the State Health Department has requested that they be notified of any incident or accident, even if confined to in-plant areas, for which AEC is notified or the nearest AEC Operations Office REAT is requested or responds. Mr. Larson stated that NSP now plans to notify the AEC, State, Wright County Sheriff's Office and NSP top management of any emergency for which notification of AEC is required.

Results of Inspection (continued)

8. Test of the Emergency Plan

During the exit interview, Mr. Larson stated that NSP plans to conduct a test of the Emergency Plan before May 31, 1970. The test will include the communication systems, evacuation system, and obtaining offsite samples, e.g., from the river. This test is not considered as part of the plant preoperational testing program. Mr. Larson said that a test plan outlining general scope of the test would be available prior to the next inspection.

B. Liquid Radioactive Waste Monitoring and Control

Mr. Eliason stated that installation of the liquid waste handling system is essentially complete, except that the discharge canal sampling system and its monitoring station nearby are still under construction, and that checkout and calibration of the liquid waste discharge line monitor has not be completed.

An apparent deficiency concerning location of the monitor for the liquid waste discharge line was described in a previous inspection report.<sup>3/</sup> During this inspection, it was observed that the liquid waste monitor and associated flow monitor had been moved to a location on the floor below the waste tanks, was mounted on a vertically oriented spool piece, and that a flush line had been connected to the monitoring pipe to flush any accumulation of crud back to the radioactive waste cleanup system.

C. Reactor Building Ventilation Exhaust (RBVE) Stack Monitor

During previous inspections, discussions have been held with the applicant considering the adequacy of the "short stack" monitor. Proposed monitoring would provide iodine and particulate as well as noble gas monitoring capability for the exhaust from the reactor building. During this inspection, the RBVE monitoring system again was discussed with the applicant. Mr. Eliason stated that discussions with GE indicated that the RBVE monitoring system would consist of a side line proportional sample to the extracted from the RBVE plenum and that this sample would be routed through a particulate prefilter plus an activated carbon cartridge, and thence to a "super sensitive" GM counter and back to the RBVE stack. Further discussion of this system with Mr. Eliason indicated that the monitor (GM counter) would be capable of measuring in the range of 0.01 to 100 mr/hr. Mr. Eliason further stated that GE had informed him that with a release rate of .021 Ci/sec that this monitor would indicate a reading of 2.5 mr/hr. (.021 Ci/sec is the annual average release rate permitted by technical specifications.) Mr. Eliason stated that GE has been requested to provide information and data which formed the basis for the sensitivity range.

<sup>3/</sup> Addendum to CO Report No. 263/70-2, Section II.B.

Results of Inspection (continued)

Mr. Eliason stated that the RBVE monitoring system GM counters would be calibrated using a cesium 137 liquid source. He also stated that before reactor operations begin, the alarm settings for this system would be set in order to magnitude lower than is expected for normal operations in accordance with recommendations from GE.

D. Main Stack Effluent Monitoring and Cleanup System

During a tour of the facility during this inspection, it was observed that the main stack installation had been completed and that the high efficiency particulate filter (HEPF) banks had been installed. The HEPF filter banks are installed in parallel and it was observed that the stack isolation valves on the offside of each of these filter banks was completed. While observing this system, Mr. Eliason stated that the filter banks are each equipped with demisters, with the demister drain lines piped to the low conductivity waste system.

It was observed that the monitoring panel for the stack monitoring system had been received and was awaiting installation. This panel was a standard GE stack monitoring panel design, equipped with a Schmidt Environmental Pump for extracting the sample from the stack. Mr. Eliason stated that the stack sampling line was stainless steel approximately one inch in outside diameter. The stack sample is extracted via an isokinetic probe installed in the stack at a point approximately 10 stack diameters ( 180 inches) above the lowest input to the stack. Mr. Eliason stated that the stack flow will be approximately 4,000 cfm, consisting of approximately 170 cfm air ejectors off-gas flow, the balance being dilution air from the Turbine Building.

This system will be calibrated with a cesium 137 source prior to fuel loading. Mr. Eliason stated that the two-in-series noble gas monitors will be calibrated with a cesium 137 liquid source similar to the way the reactor building ventilation exhaust monitor will be calibrated.

Mr. Eliason stated that the main stack particulate and iodine samples will be collected and counted in the laboratory for radioactivity content. He also stated that the main stack monitoring system would be checked periodically and calibrated using grab samples obtained from the air ejector off-gas monitoring system. These samples will be counted in the laboratory, as indicated below, and that information will be utilized for calibration of the stack monitoring system.

E. Air Ejector Off-Gas Monitoring

During a tour of the facility, it was observed that the air ejector monitoring system is located on an external wall on the outside of the room



Results of Inspection (continued)

which houses the air ejectors and consists of a vertically oriented spool piece on which three individual monitors (GM counters) are mounted. Mr. Eliason stated that two of the monitors are part of the air ejector off-gas monitoring system and the third monitor is a "flux tilt" monitor. It was observed that these monitors were installed, with high voltage and signal cables attached. Mr. Eliason stated that this system was ready for checkout and calibration.

F. Main Steam Monitoring System

During the tour of the facility, the inspectors observed the status of completion of the main steam lines. Work was underway in the location of the main steam lines but the main steam line monitors had not yet been installed.

G. Standby Gas Treatment System

During the inspection, the inspector observed the status of completion of the standby gas treatment system. This system is located adjacent to the reactor building ventilation exhaust plenum in a separate room. The system consists of two separate, redundant, filter banks with physical separation provided by locating one bank on a level above the other. It was observed that this is a custom-built system manufactured by CVI, Division of Pennwalt Corporation, Columbus, Ohio. Mr. Eliason stated that the installed system includes absolute filters and activated charcoal filters supplied by Barndby-Cheney Corporation. Mr. Eliason further stated that CVI Corporation personnel would participate in the preoperational test of the filters.

It was noted that the butterfly valves in the fan suction and discharge lines were not yet installed. Personnel at the site indicated that delivery of the valves was complicated by the transportation strike. Mr. Eliason stated that his best estimate was that the final hookup and testing of the system would be completed during the first week of May 1970.

H. Discharge Canal Liquid Sampling System

Mr. Eliason and the inspectors toured the location of the canal sampler system and observed the status of work in progress. A new monitor house was under construction to house the discharge canal monitor equipment. This was needed because of a change which will provide greater sensitivity in the canal monitor. Mr. Eliason described the arrangement of the sampler and the controls which will be exercised over that system, as follows:

Results of Inspection (continued)

Four 15-foot long standpipes will be installed across the width of the canal. Samples from the standpipes will be drawn into a 30-gallon capacity tank in the monitor house located immediately opposite the standpipes on the bank of the discharge canal. The 30-gallon tank will be equipped with two 1.5" x 1.5" sodium iodide crystal detectors which will have a capability for monitoring at concentrations of approximately  $10^{-6}$  to  $10^{-7}$  microcuries per milliliter. Readout for the detector systems will be in the control room.

When asked as to the controls which would be instituted during the time when the cooling towers are in use, Mr. Eliason stated that discharge of radioactive liquid wastes into the canal would be controlled in the following manner: The radioactive discharge line valves are interlocked with the circulating water and cooling tower pumps in such a manner to prevent discharge of any liquid waste when the circulating water pumps are inoperative, and when the cooling towers are in operation. Mr. Eliason described the system as being such that all wastes discharged to the discharge canal are at a point above the discharge canal monitoring system so that, regardless of the mode of operation of the plant, all liquid wastes will be monitored by means of the canal monitoring system.

I. Solid Radioactive Waste Handling

During the tour of the facility, it was observed that the solid waste handling facility appeared to be complete except for final installation of the solid waste baler. This facility consists of a series of cubicles adjacent to each other behind shield walls. In this mazeway, the solid waste may be packaged remotely in 55-gallon barrels, capped remotely and moved from one location to the other within the mazeway on a roller-conveyer system.

J. Quality Assurance

1. Verification of Additional NDT

C. Feierabend reviewed records onsite concerning additional NDT performed on two items related to quality identified by NSP as discussed in a previous inspection report.<sup>4/</sup>

- a. The 3" weldolet that did not receive radiograph inspection (RT) during fabrication was radiographed at the site on March 5, 1970. No defects were found. In addition, the

Results of Inspection (continued)

weld was inspected ultrasonically (UT) as a part of the base line inspection, with no defects noted. This item is considered resolved.

- b. All of the check valves within the primary pressure boundary with cover plates fabricated from plate material were inspected by UT, on March 23, 1970, by X-Ray Engineering Company. Acceptance criteria were those specified in Para. N-625.4 of Section III of the ASME B&PV Code. All of the plates met the acceptance criteria. This item is considered resolved.

2. DDR Status

H. D. Thornburg met with Messrs. W. V. Jokela and Ken Gelle of NSP and Lawrence Wolf of GE in the corporate offices of NSP on April 16, 1970, to discuss the Monticello DDR's. This was to continue discussions described in a previous inspection report.<sup>5/</sup> The following DDR's related to Table A items and also identified in connection with Dresden 2 - 3 construction work were discussed, with no additional information identified.

<u>Item</u>	<u>DDR</u>	
1	2226	RT Coverage of Recirculating Pumps
2	2269	PT Inspection of Recirculating Pump Welds
3	2270	PT Inspection of Recirculating Valve Stems
4	2271	UT Records for Recirculating Valve Stems
5	2277	PT Records for Recirculating Valve Studs
6	2640	RT Coverage for Recirculating Valve Body Castings

The remaining item unique to Monticello related to Table A was also discussed; DDR 2290, RT of Target Rock valve body castings. The inspector was shown a memorandum prepared by a GE quality assurance inspector which stated that he had reviewed 20% of the radiographs in question and had found that the radiographs met the Class 2 acceptance criteria. He stated, however, that radiographic technique did not meet the applicable ASTM. It should be noted that the GE inspector was qualified to Level 2 in radiography interpretation. Thornburg indicated that Table A referenced radiography standards for technique. Mr. Jokela indicated that DDR 2290 would be included in the Monticello Table A DDR's.

Results of Inspection (continued)

Mr. J. Tillou, CO:I, reviewed a sample of the subject radiographs at Target Rock, Inc. in Hempstead, New York, on April 27, 1970. Thornburg discussed the results of the above radiograph review with Mr. Tillou by phone on the evening of April 27, 1970. Mr. Tillou indicated that he could clearly establish the acceptability of the subject valve castings from viewing the radiographs although there were some technical code violations of the ASTM Standard for Technique.

The Monticello Table A DDR's total seven, including DDR 2290.

The following non-Table A DDR's were also discussed:

DDR

2274 Weld Ferrite Records For Recirculating Valves

No further information has been obtained. This matter was also reported for Dresden 2.

2275 Heat Treat Records Not Retained For Stainless Steel Recirculating Valve Castings

Mr. Wolf indicated that heat treatment records were available, but they could not be traced to individual valve castings. This matter was also reported in connection with Dresden 2.

2256 Molybdenum Disulfide Used As Lubricant in Certain Safety Valve Components

No new information was available on this DDR. However, Mr. Wolf indicated that information would be included in the DDR with reference to the decomposition of molybdenum disulfide at higher temperatures. He also indicated that an attempt would be made to determine the behavior of molybdenum disulfide in a steam atmosphere and, also, in the service environment of the valve.

2278 Weld Ferrite Control For Relief Valves

Mr. Wolf indicated that an attempt would be made to make Severen gauge measurements of weld ferrite in the Target

Results of Inspection (continued)

Rock relief valves. He indicated, however, that this might be difficult if only repair welds were made on the valves and the repair welds were unaccessible for Severen gauge determinations.

2300 Missing Pressure Taps Recirculation Header Spool Pieces

Mr. Gelle indicated that supplemental information had been obtained with relation to this matter. He indicated that the pressure connections in question were connections for local pressure indication and connections for the four  $\Delta P$  switches on each pump which supply a signal which ultimately becomes a part of the RHR selection logic. He indicated, further, that this matter was a fabrication oversight. Mr. Thornburg indicated that, in his opinion, this information should be included in a revised DDR which included the identification of the RHR  $\Delta P$  connections which are related to the initiation logic for ECCS, along with a statement regarding the adequacy of the relocation of these important connections. Mr. Gelle indicated that such action would be taken.

2340 Weld Metal Composition For ASTM A-358 Longitudal Welds

Mr. Thornburg indicated that the DDR, as written did not supply sufficient technical justification. Mr. Wolf indicated that a Code Committee opinion had been obtained in this matter which is attached as Exhibit II to this report. He also indicated that the technical justification would be included in a revised DDR.

2344 Traceability of Records For Three Weldolets

Mr. Wolf indicated that matter was still being pursued by GE.

2349 Valve Seat Hydrostatic Pressure Tests For High Pressure Anchor Valves

Mr. Wolf indicated that no new information was available in this matter. He indicated, however, that this DDR would be transmitted.

Results of Inspection (continued)

2591 Improper Stress Relief For One Spool of Pipe

Mr. Wolf indicated that a technical justification of acceptability of this spool of pipe had been prepared and would be included in a revised DDR.

2553 Acceptability of Field Procured Carbon Steel Pipe

Mr. Jokela indicated that, in addition to the information already obtained, efforts had been made to establish that representative samples of each of the two heats in the primary pressure boundary which had not been subjected to hydrostatic testing at 150% of design pressure received hydrostatic testing at required pressure. In one case, a piece of 10-inch diameter pipe from the heat in question was located on site and subjected to a hydrostatic test at 150% of design pressure. Thornburg examined documentation of the successful test. In the second case, a search of the spool records available on NAVCO fabricated pipe indicated that a segment of the 3-inch pipe from the heat in question was hydrostatic pressure tested at 1665 psig when that portion of the main steam line, downstream from the outboard main steam isolation valve, was tested at 150% of design pressure. The heat number in question was identified as 3-80-1A and was contained in pipe spool PS17-3-ED-3" which is located downstream from the outboard main steam isolation valve. Mr. Jokela indicated, therefore, that confidence had been obtained that the material in question would withstand a hydrostatic test of 150% of design pressure. He also indicated that the subject DDR would be updated with the new information.

2592 Valve Seat Hydrostatic Test Low Pressure Anchor Valves

No new information was obtained in this matter. Mr. Wolf indicated that this DDR would be included.

2302 Traceability of Studs and Nuts in Recirculating Piping

Messrs. Jokela and Wolf indicated that in most cases, material certification papers were not available or traceable to individual studs and nuts. Mr. Thornburg indicated that the DDR should be revised to reflect the situation as it exists. They indicated that such would be done.

Results of Inspection (continued)

2249 Use of 900-Pound Valve in 600-Pound Service

Mr. Wolf indicated that the 900-pound valve in question met the code requirements for 900-pound valves in all other respects except the hydrostatic testing of the casing. Mr. Thornburg indicated that the DDR should be modified to reflect the code conformance status of the valve.

2240 Material Substitution - Main Steam Isolation Valve Bolting

Mr. Jokela stated that the subject DDR would be forwarded.

2346 Substitution of Forged Material For Pipe

Mr. Jokela indicated that the subject DDR would be forwarded.

K. Exit Interview

An exit interview was conducted at the conclusion of the inspection with the following NSP personnel in attendance:

C. Larson  
M. Clarity  
L. Eliason  
D. Bohn

The following items concerning plant completion and emergency planning were discussed:

The inspectors stated that the reactor building ventilation system monitor and standby gas treatment system were not yet complete, and that some components were apparently not yet onsite. NSP responded that some components, such as some butterfly valves for the standby gas treatment system, were delayed by the truckers strike, but that the systems would be complete and tested prior to fuel loading.

Mr. Eliason stated that calibration of the area monitors is 50% complete with response and sensitivity verified at radiation levels to include the alarm setpoints.

Results of Inspection (continued)

The inspectors observed that the Helgeson van was at the site, and that whole body counting of the Monticello operating staff was in progress.

In discussing the Emergency Plans, Mr. Larson stated that all of the state and local agencies had been sent copies of the Emergency Plan, and that they were invited to attend a briefing held at the plant on April 8, 1970. All of the personnel invited attended with the exception of the Minnesota Department of Health (MDH) and the Wright County Sheriff and the Monticello Police Chief.

The inspector stated that his visit to the hospital confirmed that NSP contacts had been made and that the hospital administrator appeared cooperative and to be knowledgeable and interested in the NSP plan.

Mr. Eliason stated that he had made arrangements for a meeting with the MDH. CO will visit MDH to confirm that contacts have been made and that communication channels exist.

Mr. Larson stated that a "dry run" of the Emergency Plan would be conducted prior to fuel loading. He stated that this would be conducted in a manner to cause minimal disruption of construction activities, probably in more than one phase. He also stated that a plan for the test would be available prior to the next CO inspection.

In response to questions concerning completion of activities prior to fuel loading, Mr. Larson stated that the current schedule indicated that the top floor would be turned over to NSP about April 27, 1970, and that it would take two to three weeks to inspect fuel. The inspector stated that it appeared that the May 9 fuel load date could not be met. No one disagreed with the statement.

Attachments:

1. Exhibit I



EXHIBIT I

NORTHERN STATES POWER COMPANY  
MONTICELLO NUCLEAR GENERATING PLANT  
RADIATION SAFETY PROCEDURES - SUMMARY AND STATUS

<u>Section</u>	<u>Title and Summary of Contents</u>	<u>Status as of 4/16/70</u> (Approval is by NSP Operations Committee)
I	<u>General</u> - Radiation safety philosophy; assignment of responsibility to individuals, supervisors and the radiation safety group.	Approved 2/7/70
II	<u>Radiation Safety Standards</u> - Personnel exposure limits; radioactivity concentration limits; emergency exposure philosophy and limits.	Approved 1/14/70
III	<u>Radiation Area Control</u> - Definitions of areas; radiation and contamination limits; posting labelling and control devices; access to controlled areas; general procedures; Radiation Work Permits.	Approved 2/11/70
IV	<u>Monitoring</u> - Radiation level, liquid, airborne and contamination monitoring locations and frequencies; action levels; counting room use; use of various portable instrumentation; instrument calibrations.	To be approved before fuel loading
V	<u>Personnel Control and Monitoring</u> - Permissible routine exposure limits; personnel contamination limits; use of exposure monitoring devices; bioassays; personal surveys; use of protective clothing and equipment; personal decontamination.	Approved 1/15/70
VI	<u>Records and Reports</u> - Will cover all internal records keeping and reporting, e.g., to AEC, State Health Department, NSP management, etc.	In preparation. Completion awaiting final Tech Specs
VII	<u>Equipment Control</u> - Equipment radiation and contamination limits; tagging, labeling and marking; storage; in-plant movement, release and disposal.	Approved 1/15/70

<u>Section</u>	<u>Title and Summary of Contents</u>	<u>Status as of 4/16/70</u>
VIII	<u>Radioactive Materials Handling - General</u> philosophy and requirements; in-plant movement; storage; decontamination pro- cedures; source and sample handling; waste handling.	Approved 1/17/70
IX	<u>Offsite Shipments of Radioactive Materials</u> General requirements for shipments; regulatory agency requirements; classification of wastes; container specifications; quantity and radiation limits.	Approval before 5/1/70
X	<u>Radiation Safety Training Manual - Funda-</u> mentals of atomic and nuclear physics; types of radiation; radioactive decay; basic health physics principles; exposure and biological effects; exposure limits; monitoring.	Approved 4/14/70
XI	<u>Investigation and Reporting of Radiation</u> <u>Incidents and Occurrences - Internal pro-</u> cedures for handling incidents; breach of safety practice; reporting incidents.	Approved 2/11/70

COMMITTEE CORRESPONDENCE

C

Committee  
A1 Sub X and A10 Sub X1

Reply to: W. R. Sylvester  
Combustion Engineering, Inc.  
1000 Prospect Hill Road  
Windsor, Conn. 06095  
Telephone: 203-688-1911

Subject:  
Proposed Changes in  
Weld Composition of A358 and A409

Date: January 15, 1970

To:  
Mr. F. A. Brandt  
General Electric Co.  
Nuclear Energy Div.  
MC 744  
175 Curtner Ave.  
San Jose, California 95125

RECEIVED  
JAN 20 1970  
WINDSOR, CT

RECEIVED  
JAN 20 1970  
WINDSOR, CT

Dear Frank:

The Subcommittee has already approved a change in Par. 5 of A358 which will be submitted to A1 and A10 under Item 681-7. Attached is a copy of the proposed revision which also includes a supplementary for purchaser and manufacturer to limit the ferrite content of the weld.

Does this proposed change satisfy your request of Dec. 10, 1969? *Yes*  
If it does we will propose a similar change to A409.

Strict adherence to procedures would require that submittal of any proposed revision to A409 to letter ballot be first approved by the subcommittee; however, as the proposed change to A409 would duplicate that already approved for A358 we may, if Mr. Parker approves, try to place this item on the upcoming ballot with suitable explanation.

Very truly yours,

*Bill*  
W. R. Sylvester

*F. A. Brandt*  
*1/17/70*  
*FAB*

WRS:sa  
cc: Messrs. T. D. Parker  
W. B. Hoyt  
A. G. Cook  
R. H. Zong

Attachment