

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8006230374 DOC. DATE: 80/06/13 NOTARIZED: NO DOCKET #
 FACIL: 50-263 Monticello Nuclear Generating Plant, Northern States 05000263
 AUTH. NAME AUTHOR AFFILIATION
 HALL, R.E. Brookhaven National Laboratory
 RECIP. NAME RECIPIENT AFFILIATION
 FERGUSON, R.L. Assistant Director for Plant Systems

SUBJECT: Forwards draft input to facility fire protection re Items
 3.1.10A3, control of combustibles & 3.1.2.(3), automatic water
 suppression sys. Recommends accepting control of combustibles
 & sprinkler sys, if control valves electrically supervised.

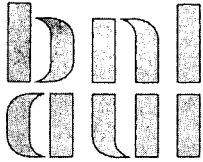
DISTRIBUTION CODE: A006S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3
 TITLE: Fire Protection Information (After Issuance of OP. Lic.)

NOTES: _____

ACTION:	RECIPIENT		COPIES		RECIPIENT	COPIES	
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME	LTTR
	BC	05	4	4			
INTERNAL:	A/D MATL&QUAL	13	1	0	CHEM ENG BR	12	1
	I&E	09	2	2	MOORE, V.		1
	NRC PDR	02	1	1	OELD		1
	OR ASSESS BR	14	1	1	REG FILE	01	1
	WAMBACH, T.	11	1	1			
EXTERNAL:	ACRS	22	16	16	LPDR	03	1
	NSIC	04	1	1			

JUN 24 1980





BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.

Upton, New York 11973

Department of Nuclear Energy

(516) 345-

June 13, 1980

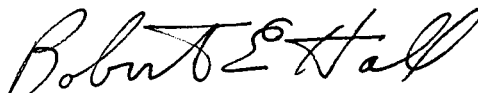
Mr. Robert L. Ferguson
Chemical Engineering
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Monticello, Fire Protection Review, Item 3.1.10A(3) and Item 3.1.2(3)

Dear Bob:

Attached is the Brookhaven National Laboratory input to Item 3.1.10A(3), Control of Combustibles, and Item 3.1.2(3), Automatic Water Suppression System.

Respectfully yours,


Robert E. Hall, Group Leader
Reactor Engineering Analysis

REH:EAM:sd
attachment

cc.: V. Benaroya wo/att.
 W. Kato "
 M. Levine "
 E. MacDougall

*Book
5/11*

80062 30374

MONTICELLO

Fire Protection Review

Item 3.1.10A(3) - Control of Combustibles

Item 3.1.10A(3) of the Monticello SER indicates that the licensee will install curbs between the turbine lube oil and ESF motor control center areas, and between the two diesel generator rooms.

By letter dated May 1, 1980 Northern States Power Company submitted design information relating to these modifications. In this submittal the licensee stated that a 9 inch high curb would be provided to isolate an uncontrolled spread of combustible liquids from communicating from one diesel generator to the other. Also in this submittal the licensee indicated that the existing curb between the turbine lube oil storage tank/reactor feedwater pump area and the ESF motor control center area will be replaced with an 8-inch high curb. The licensee stated that this curb is adequate in height to prevent the flow of liquids between these areas. In addition to the descriptions presented, the licensee provided sketches outlining the proposed modifications in more detail.

The licensee proposed modification of providing a 9 inch high curb between the two diesel generator rooms is satisfactory and we recommend that it be accepted by the staff. The other proposed modification of providing an 8 inch high curb between the lube oil storage tank and the ESF motor control center is conditionally acceptable based on verification that this curb will have sufficient capacity to contain the entire contents of the turbine lube oil reservoir with an added margin for fire suppression water. We recommend that the staff accept this part of the item subject to the above mentioned verification.

Item 3.1.2(3) - Automatic Water Suppression Systems

Item 3.1.2(3) of the Monticello SER requires the licensee to install an automatic sprinkler system to provide a means to cool hot gases that enter the cable tray area in the water treatment and ESF control center areas of the turbine building.

By letter dated April 1, 1980 the licensee responded to this item. Their submittal states that they will install a sprinkler curtain to cool any gases that may enter the water treatment and ESF motor control center area, fire zones 19A and B from a turbine lube oil reservoir fire in zone 13B. The system will be arranged to operate in conjunction with the existing turbine lube oil reservoir deluge system and will have a design capacity of 260 gpm. The existing turbine lube oil reservoir deluge system has a capacity of 1130 gpm. In the event of a turbine lube oil reservoir fire which could actuate both systems, according to the submittal, there would be an excess capacity of 1410 gpm available for manual hose streams. Included with the submittal is a sketch showing the routing of the sprinkler curtain system piping, the approximate location of the ten 160°F closed head sprinklers and the interconnection to the existing 8 inch fire protection system. The sketch does not indicate the pipe sizing of the new system although the submittal indicates that the design will conform to NFPA 13 and 15. These standards cover

sprinkler and water spray systems. The submittal also does not state if the control valves at the interconnection to the existing fire protection system will be supervised.

We recommend that the staff give conditional acceptance of the proposed sprinkler system in response to SER item 3.1.2(3) based on the premise that the control valves will be electrically supervised with valve position annunciation at the control room.