



**Northeast  
Nuclear Energy**

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The Northeast Utilities System

OCT 26 2000

Docket No. 50-423  
B18249

RE: 10 CFR 50.73(a)(2)(ii)

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Millstone Nuclear Power Station, Unit No. 3  
Licensee Event Report 2000-003-00  
Cable Routing for 3CHS\*P3B Does Not Meet Fire Safe Shutdown Analysis

This letter forwards Licensee Event Report (LER) 2000-003-00, documenting a condition that was discovered at Millstone Nuclear Power Station, Unit No. 3, on September 28, 2000. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(ii).

There are no regulatory commitments contained within this letter.

Should you have any questions regarding this submittal, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
\_\_\_\_\_  
C. J. Schwarz  
Master Process Owner - Operate the Asset

Attachment: LER 2000-003-00

cc: H. J. Miller, Region I Administrator  
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3  
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

*IE22*

Docket No. 50-423  
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Attachment 1

Millstone Nuclear Power Station, Unit No. 3

LER 2000-003-00

**LICENSEE EVENT REPORT (LER)**

(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

<b>FACILITY NAME (1)</b> Millstone Nuclear Power Station Unit 3	<b>DOCKET NUMBER (2)</b> 05000423	<b>PAGE (3)</b> 1 OF 4
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**TITLE (4)**  
Cable Routing for 3CHS\*P3B Does Not Meet Fire Safe Shutdown Analysis

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	28	2000	2000	-- 003 --	00	10	26	2000	FACILITY NAME	DOCKET NUMBER

<b>OPERATING MODE (9)</b> 1	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)</b>									
<b>POWER LEVEL (10)</b> 100	20.2201(b)			20.2203(a)(2)(v)			50.73(a)(2)(i)		50.73(a)(2)(viii)	
	20.2203(a)(1)			20.2203(a)(3)(i)			<input checked="" type="checkbox"/> 50.73(a)(2)(ii)		50.73(a)(2)(x)	
	20.2203(a)(2)(i)			20.2203(a)(3)(ii)			50.73(a)(2)(iii)		73.71	
	20.2203(a)(2)(ii)			20.2203(a)(4)			50.73(a)(2)(iv)		OTHER	
20.2203(a)(2)(iii)			50.36(c)(1)			50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A		
20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)				

<b>LICENSEE CONTACT FOR THIS LER (12)</b>										
<b>NAME</b> D.W. Dodson, Team Lead - Compliance								<b>TELEPHONE NUMBER (Include Area Code)</b> (860) 447-1791 ex 2346		

<b>COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)</b>										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>					<b>EXPECTED SUBMISSION DATE (15)</b>		MONTH	DAY	YEAR
<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE).	<input type="checkbox"/> NO								

**ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)**

On September 28, 2000, with the plant in mode 1 at 100% power, it was discovered that the 4160V power cable for charging pump, 3CHS\*P3B was not installed in the Auxiliary Building as identified by the MP3 BTP 9.5-1 Compliance Report. It was determined that this condition could have significantly challenged the ability to achieve and maintain cold shutdown per the requirements of CMEB BTP 9.5-1 if a design basis fire occurred in the area and the pump cable was damaged as a result of this fire. The MP3 BTP 9.5-1 Compliance Report credits this pump to provide Reactor Coolant Pump (RCP) seal cooling, Reactor Coolant System (RCS) inventory make-up, and RCS boration functions in the event of a postulated fire in an area of the Auxiliary Building where a fire could potentially damage all Reactor Plant Closed Cooling Water (RPCCW) pumps. The RPCCW pumps provide an alternate means of cooling the seals and are assumed to be lost in such a fire.

The cause of this condition is that the reviews performed historically failed to correctly identify the location of the power cable for the charging pump 3CHS\*P3B relative to the water curtain which has been credited as a barrier between two methods of safe shutdown.

Interim compensatory actions as outlined in the Technical Requirements Manual were immediately implemented, and remained in effect until compliance with the Compliance Report was achieved.

The power cable for the 3CHS\*P3B Pump has been relocated to place the plant in compliance with the MP3 BTP 9.5-1 Compliance Report.

**LICENSEE EVENT REPORT (LER)**  
TEXT CONTINUATION

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		2000	-- 003	-- 00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**I. Description of Event**

On September 28, 2000, while performing a self-assessment, with the plant in mode 1 at 100% power, it was discovered that the 4160V power cable for charging pump, 3CHS\*P3B [P] was not installed in the Auxiliary Building [NF] as identified by the MP3 BTP 9.5-1 Compliance Report. Contrary to the compliance report cable routing analysis, the cable is routed to the north of the water curtain located on the 24'6" elevation for a short distance such that cable integrity could not be ensured if a fire were to occur in this area. It was determined that this condition could have significantly challenged the ability to achieve and maintain cold shutdown per the requirements of CMEB BTP 9.5-1 if a design basis fire occurred in the area and the pump cable was damaged as a result of this fire. The MP3 BTP 9.5-1 Compliance Report credits this pump to provide Reactor Coolant Pump (RCP) [P] seal cooling, Reactor Coolant System (RCS) [AB] inventory make-up, and RCS boration functions in the event of a postulated fire in an area of the Auxiliary Building [NF] where a fire could potentially damage all Reactor Plant Closed Cooling Water (RPCCW) pumps [P]. The RPCCW pumps [P] provide an alternate means of cooling the seals and are assumed to be lost in such a fire.

The attached diagram depicts the area of concern in the Auxiliary Building, and the cable in question is identified in the diagram.

This condition is being reported in accordance with 10 CFR 50.73(a)(2)(ii)(B) as a condition outside the design basis of the plant.

**II. Cause of Event**

The cause of this condition is that the reviews performed historically failed to correctly identify the location of the power cable for the charging pump 3CHS\*P3B relative to the water curtain which has been credited as a barrier between two methods of safe shutdown. The cable is part of the original construction of the facility.

**III. Analysis of Event**

The potential exists that the ability to achieve and maintain cold shutdown per the requirements of CMEB BTP 9.5-1 would have been significantly challenged if the design basis fire as outlined in the MP3 BTP 9.5-1 Compliance Report occurred in the RPCCW pump area. The report identifies the 3CHS\*P3B pump as the available pump to provide Reactor Coolant Pump (RCP) seal cooling, Reactor Coolant System (RCS) inventory make-up, and RCS boration functions. An Operability Determination (OD) performed at the time the condition was identified determined that the 3CHS\*P3A pump could be aligned and used for these functions. Regardless, the fire protection program at nuclear power plants, including Millstone, is based on the defense in depth concept. This concept (design basis) is comprised of three barriers:

Fire prevention.

Rapid detection, control, and suppression.

Protection of structures, systems, and components, such that a fire which is not promptly extinguished will not prevent safe shutdown of the plant.

The defense in depth concept recognizes that while no one barrier can be perfect, maintaining multiple barriers ensures that a fire at a plant will not endanger the general public.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

For the deficiency identified, two of the three barriers were unaffected while the third line of defense to protect structures, systems, and components necessary to achieve and maintain cold shutdown of the plant in the event of a fire was compromised. The current configuration is part of the original construction in place prior to initial start-up.

Therefore, this condition is considered to be of low safety significance.

**IV. Corrective Action**

As a result of this condition, the following actions have been taken.

**Interim**

1. Hot-work has been limited in the RPCCW pump area.
2. Operability of the fire detection and suppression systems in the area is being verified once per shift.
3. Combustibles have been restricted in the area, and this is verified once per shift.
4. A continuous fire watch by trained fire brigade personnel was established for the area of concern. These personnel were briefed on a pre-planned strategy developed specifically for fighting a fire in this area.
5. Extra portable fire fighting equipment has been pre-staged in the area.

**To restore compliance**

1. The power cable for the 3CHS\*P3B Pump has been relocated to place the plant in agreement with the MP3 BTP 9.5-1 Compliance Report. The attached diagram indicates the position of the relocated cable.
2. A limited evaluation was completed to document that this is most probably an isolated condition.

Other corrective actions are being addressed via the Millstone Corrective Action Program.

**V. Additional Information**

**Similar Events**

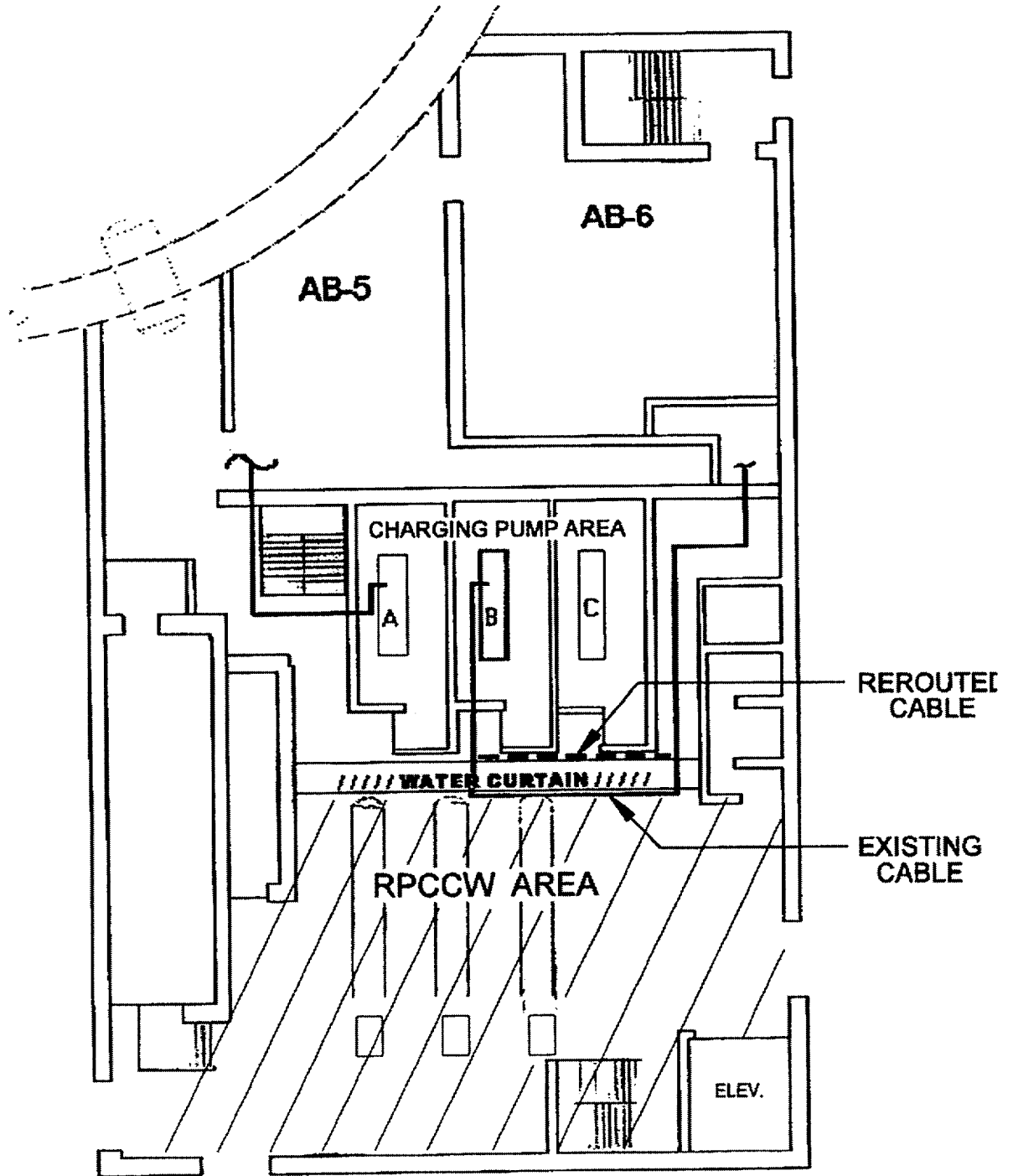
No previous similar conditions involving fire safe shutdown design basis were identified.

Energy Industry Identification System (EIIIS) codes are identified in the text as [XX].

**LICENSEE EVENT REPORT (LER)**  
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)



**AUXILIARY BUILDING \* ELEV 24'-6"**