Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385

Dominion

NOV 10 2005

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

Serial No. 05-773
MPS Lic/WEB R0
Docket No. 50-423
License No. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3
LICENSEE EVENT REPORT 2005-003-00
MANUAL REACTOR TRIP DUE TO LOSS OF TWO CIRCULATING WATER PUMPS IN SAME CONDENSER SECTION

This letter forwards Licensee Event Report (LER) 2005-003-00, documenting an event that occurred at Millstone Power Station Unit 3 on September 29, 2005. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in manual or automatic actuation of systems listed in 50.73(a)(2)(iv)(B).

If you have any questions or require additional information, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

A. J. Jordan for

11/10/05

J. Alan Price
Site Vice President - Millstone

IE22

Attachments: (1)

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Mr. G. F. Wunder
Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 08-B-1A
Rockville, MD 20852-2738

Mr. S. M. Schneider
NRC Senior Resident Inspector
Millstone Power Station

NRC FORM 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Millstone Power Station - Unit 3	05000423	1 OF 3

TITLE (4)
Manual Reactor Trip Due to Loss of Two Circulating Water Pumps in Same Condenser Section

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER 05000
9	29	2005	2005	-003-	00	11	10	2005	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	1
POWER LEVEL (10)	100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) (11)

20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
20.2201(d)	20.2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)
20.2203(a)(1)	50.36(c)(1)(i)(A)	X 50.73(a)(2)(iv)(A)	73.71(a)(4)
20.2203(a)(2)(i)	50.36(c)(1)(ii)(A)	50.73(a)(2)(v)(A)	73.71(a)(5)
20.2203(a)(2)(ii)	50.36(c)(2)	50.73(a)(2)(v)(B)	OTHER
20.2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)	Specify in Abstract below or In NRC Form 366A
20.2203(a)(2)(iv)	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(D)	
20.2203(a)(2)(v)	50.73(a)(2)(i)(B)	50.73(a)(2)(vii)	
20.2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)	
20.2203(a)(3)(i)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
David W. Dodson, Supervisor Nuclear Station Licensing	860-447-1791

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
☐ YES (If yes, complete EXPECTED SUBMISSION DATE).	☒ NO				

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

On September 29, 2005, at approximately 1313 with the unit in Mode 1 at 100 percent power, Millstone Unit 3 reactor was manually tripped due to the loss of two circulating water [CW] pumps in the same condenser section. This event is being reported pursuant to 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in manual or automatic actuation of any of the systems listed in 50.73(a)(2)(iv)(B). This includes Reactor Protection System [RPS], actuation Reactor trip.

At approximately 1313 on September 29, 2005, Millstone Unit 3 reactor was manually tripped due to the loss of two [CW] pumps in the same condenser section resulting from deteriorating conditions related to a storm consisting of high winds and waves. At approximately 1311, the 'A' CW pump automatically tripped due to high traveling screen differential pressure. At 1313, the 'B' CW pump also automatically tripped due to high traveling screen differential pressure. The operators then tripped the reactor in accordance with operating procedures. The event review team (ERT) concluded that environmental factors such as tide, wave height, wind speed and direction, and debris contributed to the event. Plant systems performed as designed and plant personnel operated the plant in a safe manner following the procedural guidance provided.

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Millstone Power Station - Unit 3	05000423	2005	-- 003 --	00	2 OF 3

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

1. Event Description

On September 29, 2005, at approximately 1313, with the unit in Mode 1 at 100% power, Millstone Unit 3 reactor was manually tripped in accordance with established procedures, due to the loss of two circulating water [CW] pumps in the same condenser section.

Weather conditions began to deteriorate at approximately 1216 as a result of a passing storm. At approximately 1311 the 'A' [CW] pump 3CWS-P1A tripped due to high traveling screen differential pressure. At approximately 1313 the 'B' CW pump 3CWS-P1B tripped due to high traveling screen differential pressure. Once the control operator announced the second CW pump trip, the unit supervisor ordered the manual reactor trip and entry into emergency operating procedure (EOP) E-0, "Reactor Trip or Safety Injection."

Plant systems responded as designed and no adverse off-site radiological consequences resulted from this event.

Personnel in the intake structure during the event identified some debris loading, heavy wave action and strong winds. According to personnel dispatched, the conditions at the intake structure had an estimated wave height of approximately 8 ft. with water in the intake bay changing levels by approximately 4 ft. The plant computer records show sustained wind speeds of > 30 mph (gusting between 35-50 mph). The wind direction/speed, wave height, and debris loading created conditions that challenged the intake equipment.

2. Cause

Unusually severe environmental conditions challenged the design of the MP3 Intake structure causing the loss of two circulating water pumps and thus required the Manual Trip of the Reactor.

The 'A' and 'B' CW Pumps tripped due to a high differential pressure across the traveling screens. The differential pressure (dp) setpoints of 'A' and 'B' traveling screens were exceeded, due to the combination of wind direction/speed, wave height, and debris loading.

Large swell oscillations in the intake bay prevented accumulating, suspended debris from collecting on the traveling screens until debris density became significant. Subsiding oscillations allowed the debris to collect on the screens causing the 'A' CW pump to automatically trip. The debris then migrated to the 'B' bay, adding to the loading on the 'B' traveling screen and the subsequent trip of the 'B' CW pump.

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Millstone Power Station - Unit 3	05000423	2005	-- 003 --	00	3 OF 3

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

3. Assessment of Safety Consequences

The reactor trip resulted in a loss of normal heat removal (condenser not available). The condenser was not available due to the loss of two circulating water pumps and loss of the C-9 interlock, prohibiting the use of the condenser steam dump valves. When the 'A' CW pump was restored to service at 1343, the condenser became available and the C-9 interlock was actuated.

The auxiliary feedwater system started automatically on the trip as expected and restored the steam generator levels to their normal operating band. Heat removal capability was maintained.

The operator actions and plant mitigating equipment responded as expected with no failures. There were no challenges to any fission product barrier. Therefore, there were no safety consequences to the reactor trip on September 29, 2005.

4. Corrective Action

Actions to Prevent Recurrence:

Actions were initiated in the station corrective action program to review possible design changes to the MP3 intake structure that would reduce the susceptibility to environmentally induced trips.

5. Previous Occurrences

None

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