

Maine Yankee

RELIABLE ELECTRICITY SINCE 1972

329 BATH ROAD • BRUNSWICK, MAINE 04011 • (207) 798-4100

November 25, 1996

MN-96-175

JRH-96-264

UNITED STATES NUCLEAR REGULATORY COMMISSION

Attention: Document Control Desk

Washington, D. C. 20555

Reference: (a) License No. DPR-36 (Docket No. 50-309)

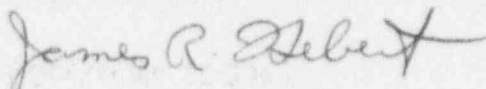
Subject: Maine Yankee Licensee Event Report 96-034, Inadequate Cable Separation
for Post Accident Hydrogen Monitors

Gentlemen:

Please find enclosed Maine Yankee Licensee Event Report 96-034 . This report is
submitted in accordance with 10 CFR 50.73(a)(2)(ii).

Please contact us should you have any questions regarding this matter.

Very truly yours,



James R. Hebert, Manager
Licensing & Engineering Support Department

mwf

Enclosure

c: Mr. Hubert Miller
Mr. J. T. Yerokun
Mr. D. H. Dorman
Mr. Patrick J. Dostie
Mr. Uldis Vanags

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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: 50.0 HRS. REPORTED LESSONS LEARNED ARE
INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD
COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND 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.

FACILITY NAME (1)

Maine Yankee Atomic Power Company

DOCKET NUMBER (2)

50-309

PAGE (3)

1 OF 3

TITLE (4)

Inadequate Cable Separation for Post Accident Hydrogen Monitors

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
10	25	96	96	-- 034	-- 00	11	25	96	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		7	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)							
POWER LEVEL (10)		90	20.2203(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)			

LICENSEE CONTACT FOR THIS LER (12)

NAME

Ethan Brand, NSEG Supervisor

TELEPHONE NUMBER (Include Area Code)

207-882-5661

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES

(If yes, complete EXPECTED SUBMISSION DATE).

☒ NOEXPECTED
SUBMISSION
DATE (15)

MONTH

DAY

YEAR

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

On October 25, 1996, Maine Yankee was operating at Condition 7 at 90% steady state. A Maine Yankee engineer was performing a walkdown of available conduits between the Main Control Board (MCB) section C and the cable vault. The engineer determined two cables associated with post accident hydrogen monitoring instrumentation were incorrectly routed through the same conduit. One of the cables was immediately determined to bring the plant into compliance with its cable separation design criteria. The cable determined affected a Main Control Board recorder for one of two hydrogen analyzers.

Corrective actions planned is to properly reroute the cable and to investigate the cause of the event to determine if more comprehensive corrective action is warranted.

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

Initial Plant Conditions:

On October 25, 1996, Maine Yankee was operating at Condition 7 at 90% steady state power.

Event Description

On October 25, 1996, at 1308, the Main Control Room was notified that a Maine Yankee engineer performing a walkdown of available conduits between the Main Control Board (MCB) section C and the cable vault had determined the following cables were incorrectly routed through the same conduit(#227):

Cable	Train/Channel	Function
1VB128	A/A (Vital Bus 1)	Comsip Post Accident Hydrogen Analyzer control power.
1IT354	B/C (Vital Bus 3)	Bendix Post Accident Hydrogen Analyzer output signal to MCB recorder.

FSAR Chapter 8.3.7 description of Power and Control Cable Systems requires the following:

- 1) Instrument cables are separate from control and power cables.
- 2) Redundant safety related cables are run separately
- 3) Cables are separated by vital bus.

The routing of these two cables is not consistent with these requirements since a Vital Bus 1 cable was routed in the same conduit as a vital bus ? cable.

The Bendix was declared inoperable and the Comsip was declared operable. Tech Specs were satisfied. Tech Spec 3.9.C requires one containment hydrogen monitoring system (IP), therefore, it does not need to be single failure proof for Tech Spec compliance. Reg. Guide 1.97 requires two systems and is not satisfied.

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

1403 - A 1 hour ENS notification made due to the plant being outside its design basis.

1530 - Bendix cable 1IT354 was disabled by lifting leads at both ends. The Bendix is operable, but the Main Control Board recorder is not operable. The loss of the recording capability of the Bendix analyzer is a Reg. Guide 1.97.

SAFETY SIGNIFICANCE:

The Safety Significance of this issue is minimal. Only one hydrogen analyzer is required by Technical Specifications. Reg. Guide 1.97 requires redundancy, which was not met.

CAUSAL FACTORS:

The cause of this issue was less than adequate control of cable separation. This issue is being factored into a more comprehensive root cause investigation of cable separation issues at Maine Yankee.

CORRECTIVE ACTIONS:

The Bendix cable 1IT354 was disabled by lifting leads at both ends. This brought the plant back into conformance with cable separation design criteria.

A modification is being developed to properly route the cable.

A comprehensive root cause investigation is being conducted to examine cable separation issues at Maine Yankee to determine if more global corrective action is required.

PREVIOUS SIMILAR EVENTS:

LER 94-005-01 "Reg. Guide 1.97 Containment Hydrogen Monitoring Instrumentation Outside Design Basis" described a cable separation issue involving the same two instruments as in this LER. As a result of the event described in LER 94-005-01, a comprehensive review of associated installations was completed. Part of the investigation regarding this event will be to examine why this cable separation issue was not identified earlier.