

Maine Yankee

RELIABLE ELECTRICITY SINCE 1972

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

September 23, 1996

MN-96-140

JRH-96-213

UNITED STATES NUCLEAR REGULATORY COMMISSION

Attention: Document Control Desk

Washington, D. C. 20555

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

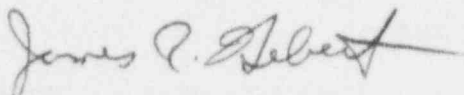
Subject: Maine Yankee Licensee Event Report 96-021, Missed Technical Specification
Surveillance Interval for Secondary Coolant Activity

Gentlemen:

Please find enclosed Maine Yankee Licensee Event Report 96-021 . This report is submitted in accordance with 10 CFR 50.73(a)(2)(i).

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. E. H. Trottier
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)

Missed Technical Specification Surveillance Interval for Secondary Coolant Activity

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
08	22	96	96	-- 021	-- 00	09	23	96	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		3	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5; (Check one or more) (11)							
POWER LEVEL (10)		0%	20.2201(b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/>		50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)		20.2203(a)(3)(i)				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

William P. Evans and James M. Taylor, Nuclear Safety Engineer

TELEPHONE NUMBER (Include Area Code)

(207) 882-5683

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).		X NO		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On August 22, 1996, Maine Yankee was in steady state cold shutdown. The steam generators were in service to remove residual heat and maintain the primary coolant below 210 °F while operators conducted repairs upon a valve in the Residual Heat Removal system.

Technical Specification 4.2 Table 4.2-1 item 7 requires secondary coolant Gross Activity Determination at least once every 72 hours. Since Maine Yankee procedures for sampling did not apply this requirement to cold shutdown conditions, preparations had not been made for sampling while the valve repair work was in process. When asked about sampling by the Independent Safety Assessment Team, plant personnel concluded that the specification also applied to the cold shutdown condition and attempted to take steam generator samples. But the plant configuration prevented sampling using the normal sampling flow path. By the time Maine Yankee personnel were able to collect samples using an alternate flow path the technical specification allotted time had expired.

The sampling procedure has been revised to require sampling every 72 hours in all plant operating conditions. The technical specification requirement for this surveillance is not appropriate for cold shutdown conditions. The technical specification will be revised to clarify the requirement for sampling the secondary coolant.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)	PAGE (3)
Maine Yankee Atomic Power Company	50-309	YEAR SEQUENTIAL NUMBER REVISION NUMBER	2 OF 3
		96 - 021 -- 00	

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

INITIAL PLANT CONDITIONS:

Maine Yankee was in steady state cold shutdown at 0230 on August 22, 1996. The plant was operating with the steam generators cooling being utilized to remove decay heat in order to maintain primary system temperature below 210 °F. These conditions placed the steam generators under vacuum conditions from the condenser. Vacuum conditions prevented sampling of the secondary coolant by the normal sampling flow path.

EVENT DESCRIPTION:

On August 18, 1996, at 0830 hours with the plant in Hot Shutdown (Condition 5), plant personnel satisfactorily completed a sample of the secondary coolant. Subsequently, at 0910 hours, the plant began an orderly shutdown per management directive (to investigate concerns with surveillance procedure testing as discussed in LER 96-020). Maine Yankee plant management decided to accomplish repairs to the Residual Heat Removal [BO] System Recirculation Stop Valve [V], RH-4, during the shutdown and decided to maintain the steam generators operable to maintain Reactor Coolant [AB] System temperature less than 210 °F (as allowed by Technical Specification 3.8).

When the plant is operating with the steam generators [SG] at less than 210°F, it is possible to draw a vacuum in the steam generators from the condenser [COND]. Vacuum prevents the sampling of the secondary coolant through the normal sampling flow paths. Technical specification 4.2 (in Table 4.2-1) requires the secondary coolant be sampled every 72 hours (+ 18 hours) to determine its activity.

In response to a question from the Independent Safety Assessment Team, Maine Yankee personnel determined that the current sampling frequency did not accurately implement the technical specification requirement. Attempts to take samples by the normal flow path were not successful. By 0230 on August 22, 1996, the required interval plus extension had been exceeded.

Maine Yankee personnel were able to complete sampling of the steam generators via alternative flow paths at 1545 hours on August 22, 1996. The activity of the coolant was found to be well within the allowable levels in all of the samples.

SAFETY SIGNIFICANCE:

Maine Yankee has discussed this event with NRC Region 1 and NRR, and the parties have agreed that the safety significance of this event was low. Combustion Engineering developed the original Technical Specification requirement and has stated that it did not intend that the specification apply to plants in cold shutdown condition.

In the past, Maine Yankee has performed sampling and testing of the secondary coolant for gross gamma activity during appropriate operating conditions (when in an operating Condition higher than Cold Shutdown and when primary to secondary leakage was most probable). Therefore, the plant was testing for activity in the secondary coolant in a manner which would ensure that the health and safety of the public were not endangered.

LICENSEE EVENT REPORT (LER)

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

CAUSAL FACTORS:

Review of the current revision of the Chemistry Department procedure (No. 3-7-4-2, "Secondary System Chemistry Surveillance") for secondary sampling indicates that the procedure did not require sampling to determine the gross gamma activity in the secondary side of the Steam Generators unless the plant was operating in Condition 7, power operations. A review of the historical revisions of the procedure shows that these revisions did not require secondary gross gamma activity samples to be taken when the plant was in cold shutdown.

The Technical Specification, as written, requires sampling and testing of the secondary side coolant during all operating conditions. This requirement was not appropriate in that it did not meet the original intent of the Combustion Engineering Standard Technical Specifications. The literal interpretation of the Technical Specification was not incorporated into the plant chemistry procedure for sampling.

CORRECTIVE ACTIONS:

- Maine Yankee has initiated a Technical Specification change to clarify the Technical Specification requirements for secondary coolant sampling. The clarification will detail the operating conditions for which secondary coolant activity sampling is required, consistent with the manufacturers recommendations.
- Maine Yankee has revised procedure 3-7-4-2 to include sampling for gross gamma activity determination in accordance with the Technical Specification requirement. This temporary change is to remain in place until the revised technical specification is approved.

SIMILAR EVENTS:

Maine Yankee has reported several events wherein Technical Specification required surveillance samples have not been performed in the required intervals: LERs 76-006, 77-002, 77-008, 78-024, 78-027, 79-010, 81-023, and 81-024 describe events where the technical specification interval was missed. Failure was attributed to personnel error due to inadequate procedural guidance or personnel misunderstanding of requirements. Corrective actions described in these LERs include training of chemistry technicians in the sampling requirements, including required sampling intervals. The requirement to sample the secondary coolant and test for gross gamma activity in all operating conditions was not identified in the corrective actions for these LERs.

In addition, LER 77-009 describes an event where a surveillance was not taken, but the required sampling point (in the Sasanoa River) was to be changed to a better sampling point (in the Kennebec River), so that the intent of the Technical Specification could be better served.