

Docket No. 50-336  
B16571

Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Addendum 2 - June 27, 1997 to Millstone Power Station Unit No. 2  
Annual Report dated February 28, 1997

June 1997

9707110238 970627  
PDR ADOCK 05000336  
K PDR

INTRODUCTION

None of the plant design changes described herein constitute, nor constituted, an unreviewed safety question per the criteria of 10CFR50.59.

PLANT DESIGN CHANGES

<u>PDCR Number</u>	<u>TITLE</u>
2-019-93	Maintenance Shop Underground Fuel Oil Storage Tank Removal and Replacement

<u>FSARCR Number</u>	<u>Title</u>
97-MP2-10	FSAR Change Request to Table 9.9-11, Control Room Air Conditioning (CRAC) System, Table 9.9-15, Balance of Unit Ventilation, and Table 9.9-19, Vital Switchgear Ventilation System
97-MP2-19	Revised FSAR Section 14.4.1, Uncontrolled Rod Withdrawal (URW) From A Subcritical or Low Power Startup Condition
97-MP2-21	Main Exhaust System

FSAR SECTIONS AFFECTED

<u>Annual Report Number</u>	<u>FSARCR Sections/Tables/Figures</u>
PDCR 2-019-93	Section 2.5.4.2.5 (processed under FSARCR 97-MP2-15)
FSARCR 97-MP2-10	Table 9.9-11, Table 9.9-15, and Table 9.9-19
FSARCR 97-MP2-19	Section 14.4.1, Table 14.0.3-1, Table 14.0.9-1, Table 14.4.1-2, Table 14.4.1-3, and Figure 14.4.1-1 through Figure 14.4.1-6
FSARCR 97-MP2-21	Section 9.9.9.4

PDCR Number

Title

2-019-93

Maintenance Shop Underground Fuel Oil Storage Tank Removal and Replacement

Description of Change

This change is complete. It changed the maintenance shop 1,000 gallon underground heating oil tank to a 1,000 gallon aboveground storage tank. The underground tank was located south of the Millstone Unit 2 Maintenance Shop for use as an oil supply for the warehouse heating system. It was replaced with an aboveground fuel oil storage tank located in the yard area northeast of the Millstone Unit 2 Maintenance Shop. The associated electrical and plumbing auxiliaries were also replaced. The existing heating oil pump was relocated from its location near the south exit door to the north wall of the warehouse for closer proximity to the tank.

Reason for Change

The original underground tank had exceeded its 15 year normal life warranty and required replacement. Leakage from the tank would not be readily apparent and would result in an expensive soil cleanup effort. The aboveground tank reduces the possibility of an unrecognized leak.

Safety Evaluation

The Millstone Unit 2 Maintenance Shop aboveground heating oil storage tank is double-walled and concrete encased to provide double containment for tank integrity assurance. The aboveground tank does not interface or interact with systems or equipment important to safety, and, in the event of a design basis accident, does not provide mitigating action for Millstone Unit 2.

This change, and the aboveground storage tank itself, did not alter design, operation or reliability of any system or equipment important to safety, nor did they affect any physical protective boundary such as the Reactor Coolant System pressure boundary, fuel cladding or containment.

FSAR Section 2.5.4.2.5 was revised to reflect the removal of the non-QA underground heating oil tank with a non-QA 1,000 gallon aboveground diesel fuel oil tank in the yard area northeast of the Millstone Unit 2 Maintenance Shop.

FSARCR Number

Title

97-MP2-10

FSAR Change Request to Table 9.9-11, Control Room Air Conditioning (CRAC) System, Table 9.9-15, Balance of Unit Ventilation, and Table 9.9-19, Vital Switchgear Ventilation System

Description of Change

This evaluation addressed changes to FSAR Table 9.9-11, CRAC System, Table 9.9-15, Balance of Unit Ventilation, and Table 9.9-19, Vital Switchgear Ventilation System Component Description. The changes removed equipment specifications for CRAC Fans (F21A, F21B, F22A, F22B, F36A, F36B, F31A, F31B, F32A, F32B), Intake Structure Fans (F114A, F114B, F114C) and Warehouse Ventilation Fans (F113A, F113B), and Vital Switchgear Ventilation Fans (F51, F52, F54A, F54B, F133, F134, F142). The FSAR information changes included the design data for the fan and related components (motor, fans, and cooling coils).

Reason for Change

The changes to the FSAR tables (9.9-11, 9.9-15 and 9.9-19) were made to remove unnecessary technical data listed in the tables. The FSAR table changes permit Item Equivalency Evaluations to be conducted to replace the fans motors in accordance with Nuclear Group Procedure 6.12, Evaluation of a Replacement Item.

Safety Evaluation

The specific technical fan data addressed in the table changes did not affect any component's safety function. The fan functions and design characteristics were not changed from their existing design and licensing basis. The equipment specifications are controlled in plant specifications and drawings.

FSARCR Number

Title

97-MP2-19

Revised FSAR Section 14.4.1, Uncontrolled Rod Withdrawal (URW) From A Subcritical Or Low Power Startup Condition

Description of Change

This change revised FSAR Section 14.4.1 analysis for the "Uncontrolled Control Rod/Bank Withdrawal From A Subcritical Or Low Power Startup Condition," also known as the URW analysis. The analysis performed in Section 14.4.1 is intended to bound a URW event from either Mode 2 or Mode 3. An error was made in determining what control rod configurations needed to be considered for Mode 2 and Mode 3 URW analysis. The revised URW analysis for this event corrected this error by including the proper control rod configurations, and resulting radial and axial peaking factors allowed in Modes 2 and 3.

The error was made in this event (FSAR Section 14.4.1) only. Other Chapter 14 analyses were not affected.

Reason for Change

ACR M2-96-0252 documented an error found in the FSAR Section 14.4.1 analysis for the "Uncontrolled Control Rod/Bank Withdrawal From A Subcritical or Low Power Startup Condition." The error was made in determining what control rod configurations needed to be considered for Mode 2 and Mode 3 URW analysis. As a result, the limiting radial and axial peaking factors were not used in the existing Mode 2 and Mode 3 URW analysis.

Safety Evaluation

This change did not involve modifications to plant equipment, procedures or practices. The incorporation of more limiting radial and axial peaking factors in the URW analysis maintains the margin of safety to ensure that centerline fuel melt does not occur and the minimum Departure from Nucleate Boiling Ratio limit is not exceeded.

FSARCR Number

Title

97-MP2-21

Main Exhaust System

Description of Change

This change correctly identified the recommended testing for the Main Exhaust System high efficiency, particulate, air (HEPA) filters and removed an incorrect referral to FSAR section 6.7.4.2. This change removed the statement, "The particulate and HEPA filters are designed in accordance with the requirements of Subsection 6.7.4.2" from Subsection 9.9.9.4.2 and replaced it with "The HEPA filters are periodically tested following the guidelines of Regulatory Guide 1.140 and ANSI N510-1975, Testing of Nuclear Air-Cleaning Systems." The added statement provided the proper guidelines for performing the necessary testing of the main exhaust HEPA filters.

The statement that the Main Exhaust System "HEPA filters are designed in accordance with requirements of Subsection 6.7.4.2" was inappropriate. Subsection 6.7.4.2 pertains to the Enclosure Building Filtration System (EBFS), which is a QA accident mitigating system. The Main Exhaust System is a Non-QA system not relied on during or following an accident. Referring the Non-QA Main Exhaust System HEPA filters to the QA requirements of Subsection 6.7.4.2 was inappropriate. Subsection 6.7.4.2 refers to Regulatory Guide 1.52 which provides guidance for testing post accident engineered safety feature atmosphere cleanup systems. Regulatory Guide 1.140 provides guidance for testing normal ventilation exhaust system air filtration. A search of historical documents did not reveal any Millstone Unit 2 commitment to Regulatory Guide 1.140, however, testing will be performed per ANSI N510-1975 and plant procedures. Although the same test standard is used to test the HEPA filters for both systems, the quality assurance requirements for the EBFS do not apply to the Main Exhaust System.

Reason for Change

NRC Inspection Report 50-336/96-13 identified that the main exhaust system HEPA filters, via reference to Subsection 6.7.4.2, required periodic efficiency testing. This testing was never performed for the Main Exhaust System HEPA filters. Review of the requirements specified in Subsection 6.7.4.2 determined that they did not apply for the Main Exhaust System HEPA filters. Further review identified that the guidelines provided in Regulatory Guide 1.140 did apply for the Main Exhaust System HEPA filters. This change clarified the discrepancy.

Safety Evaluation

The Main Exhaust System HEPA filters are a non-safety related component. This testing affects only the Main Exhaust System and is performed on-line. It does not affect Main Exhaust System operation and has no impact on any other Millstone Unit 2 System. Test gas is inserted upstream of the HEPA filters and concentration measurements taken upstream and downstream of the HEPA filters to determine filter efficiency. Test ports are provided on the filter housings. The test gas is exhausted to atmosphere. Test gas insertion and measurement are performed during normal system operation.