Millstone Power Station Unit 3
Safety Analysis Report

Chapter 18: Human Factors Engineering

CHAPTER 18—HUMAN FACTORS ENGINEERING

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CHAPTER 18 - HUMAN FACTORS ENGINEERING

18.1 HUMAN FACTORS CONTROL ROOM DESIGN REVIEW

The Licensee is cognizant of the criteria promulgated by the Nuclear Regulatory Commission (NRC) concerning the Human Factors aspects of nuclear power plant design and operation. As such, a Control Room Design Review (CRDR) utilizing the guidance contained in NUREG-0737, Supplement 1 and NUREG-0700, “Guidelines for Control Room Design Reviews,” has been performed.

The objective of performing the CRDR is to ensure that the Millstone Nuclear Power Station Unit 3 control room provides an effective safe control center such that operators can satisfactorily perform the necessary functions required during normal operating, transient and emergency conditions.

The scope of the review included all controls, displays and other components on the control boards, peripheral consoles, back panels, communication equipment ancillary devices and procedures that the control room operators would be expected to interface with. For purposes of the review, the remote shutdown panels were also included in the CRDR.

As recommended in NUREG-0801, “NRC Evaluation Criteria for Detailed Control Room Design Reviews,” the Licensee provided the NRC with a detailed program plan for the CRDR. This implementation plan was submitted to the NRC on November 10, 1983.

Following completion of the CRDR a summary report was transmitted to the NRC on November 1, 1984. Addendum 1 to the summary report was submitted to the NRC on September 12, 1985, and Addendum 2 was submitted on November 14, 1985. The NRC Staff resolved all issues related to the CRDR in Supplement 4 to the Millstone Unit No. 3 SER.

18.2 SAFETY PARAMETER DISPLAY SYSTEM (SPDS)

Refer to Section 7.5 for description of SPDS.