

ATTACHMENT 3

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR AMENDMENT TO 10 CFR, "CODES AND STANDARDS"

Environmental Assessment

Identification of Action

The U.S. Nuclear Regulatory Commission (NRC) is amending its regulations to incorporate by reference a later edition and addenda (1997 Addenda, 1998 Edition, 1999 Addenda, and 2000 Addenda) of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (BPV Code) and the ASME *Code for Operation and Maintenance of Nuclear Power Plants* (OM Code) to provide updated rules for construction, inservice inspection (ISI), and inservice testing (IST) of components of light-water cooled nuclear power plants.

The regulations in Title 10, Section 50.55a, of the *Code of Federal Regulations* (10 CFR 50.55a) require that licensees revise their ISI and IST programs every 120 months to the latest edition and addenda of the ASME Code incorporated by reference in § 50.55a and in effect 12 months prior to the start of the new 120-month interval; permit licensees to voluntarily update their construction, ISI, and IST programs at any time to the most recent edition and addenda of the ASME BPV and/or OM Codes incorporated by reference in § 50.55a with the approval of the NRC; and specify the edition and addenda of Section III of the ASME BPV Code that must be applied for the construction of reactor coolant pressure boundary components.

Need for Action

It has been NRC practice to review new editions and addenda of the ASME BPV Code, and more recently, the ASME OM Code, and periodically update § 50.55a to incorporate newer editions and addenda by reference in the regulations. On May 4, 2000, the NRC staff advised the Commission of its intent to amend § 50.55a in SECY-00-0100, "Initiation of NRR-Sponsored Rulemaking: Codes and Standards." The Commission accepted this staff action in a staff requirements memorandum (SRM) dated May 23, 2000.

The ASME BPV and OM Codes are subject to continuing refinement and improvements that are related to defense-in-depth considerations. History has shown that technological advancement and improvement in ISI and IST techniques over long periods of time are a certainty. This final rule meets the NRC goal of maintaining safety by continuing to provide NRC review and endorsement of the latest editions and addenda of the ASME BPV and OM Codes. It reduces unnecessary regulatory burden and improves NRC efficiency and effectiveness by eliminating the need for licensees to submit plant-specific relief requests, and for the NRC to review those submittals when implementing improved technology or techniques in the later edition and addenda of the Code. The NRC endorsement of technological advances and improved testing and inspection techniques in the ASME Code increases public confidence. Also, the rulemaking process provided an opportunity for public comment, thereby enhancing communication with stakeholders.

Environmental Impacts of the Proposed Action

Estimates of environmental impacts associated with revising § 50.55a to incorporate by reference the 1997 Addenda, 1998 Edition, 1999 Addenda, and 2000 Addenda of the ASME BPV and OM Codes are as follows.

- The provisions of Table IWE-2500-1, Examination Category E-A, Items E1.10 and E1.11, were relaxed in the in the 1998 Edition, 1999 Addenda, and 2000 Addenda of Section XI of the ASME BPV Code to no longer require a torque test of each containment bolted connection. The elimination of the torque test reduces occupational exposure to the personnel who performed torque tests. The NRC current estimates for exposure are approximately 20 millirem for performing a torque test on each containment bolted connection. It is estimated that there are 50 containment bolted connections in each unit, therefore, the occupational exposure for the industry is estimated to be reduced by 1 person-rem per unit per 120-month interval (20 millirem x 50 bolted connections). The industry's occupational dose cost savings per 120-month interval would be on the order of \$206,000 (1 person-rem x \$2,000 x 103 units).
- The 1998 Edition of Section XI of the ASME BPV Code deleted the requirement to visually examine containment seals and gaskets that was previously in Table IWE-2500-1, Category E-D, Items E5.10 and E5.20. The elimination of the examination of containment seals and gaskets reduces occupational exposure to the personnel who examine the drywell head seals in Mark I and Mark II containments. The current NRC estimates for exposure are approximately 100 millirem for examining drywell head seals in Mark I and Mark II containments. There are 24 units with a Mark I containment design and 7 units with a Mark II design. The occupational exposure is estimated to be reduced by 3.1 person-rem during each 120-month interval (100 millirem x 31 units). The industry's occupational dose cost savings per 120-month interval would be on the order of \$6,200 (3.1 person-rem x \$2,000).

The final rule does not significantly increase the probability or consequences of accidents; no changes are being made in the types of any effluents that may be released off-site; there is a decrease in occupational exposure; and there is no significant increase in public radiation exposure. Therefore, there are no significant radiological impacts associated with this action. The final rule does not involve non-radiological plant effluents and has no other environmental impact. Therefore, there are no significant non-radiological impacts are associated with this action.

Alternative Use of Resources

This action does not involve the use of any resources other than those previously considered in the rule dated September 22, 1999 (64 FR 51370) that incorporated by reference in § 50.55a the 1989 Addenda, 1990 Addenda, 1991 Addenda, 1992 Edition, 1992 Addenda, 1993 Addenda, 1994 Addenda, 1995 Edition, 1995 Addenda, and 1996 Addenda of Section III, Division 1 and Section XI, Division 1 of the ASME BPV Code; and the 1995 Edition and the 1996 Addenda of the ASME OM Code.

States Consulted and Sources Used

The NRC requested the views of the States on the environmental assessment for the rule and did not receive any comments from the States.

Finding of No Significant Impact

On the basis of the environmental assessment, the Commission concludes that the final rule does not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined that it is not necessary to prepare an environmental impact statement for the final rule.