UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

VT-2 EXAMINER QUALIFICATION RELIEF REQUEST

PECO ENERGY COMPANY

PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3

DOCKET NOS. 50-277 AND 50-278

1.0 INTRODUCTION

The technical specifications for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, state that the inservice inspection of the American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by Title 10 of the Code of Federal Regulations, Part 50, Section 55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). Paragraph 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the Nuclear Regulatory Commission (NRC), if (i) the proposed alternatives would provide an acceptable level of quality and safety or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," to the extent practical within the limitations of component design, geometry, and materials of construction. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval, and subsequent intervals, comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The applicable ASME Code, Section XI, for the Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, second 10-year inservice inspection (ISI) interval is the 1980 Edition through Winter 1981 addenda. The components (including supports) may meet the requirements set forth in subsequent editions and addenda of the ASME Code incorporated by reference in 10 CFR 50.55a(b) subject to the limitations and modifications listed therein and subject to Commission approval.

Pursuant to 10 CFR 50.55a(g)(5), if the licensee determines that conformance with an examination requirement of Section XI of the ASME Code is not practical for its facility, information shall be submitted to the Commission in support of that determination and a request made for relief from the ASME Code requirement. After evaluation of the determination, pursuant to 10 CFR 50.55a(g)(6)(i), the Commission may grant relief and may impose alternative requirements that are determined to be authorized by law, will not endanger life, property, or the common defense and security, and are otherwise in the public interest, giving due consideration to the burden upon the licensee that could result if the requirements were imposed.

In the July 21, 1997, letter to the NRC, PECO Energy Company requested relief from the applicable ASME Code, Section XI, paragraph IWA-2300, concerning VT-2 examination personnel qualification requirements. PECO Energy Company requested approval to implement ASME Code Case N-546, "Alternative Requirements for Qualification of VT-2 Examination Personnel," in their ISI program during the current inspection interval. The NRC staff has reviewed and evaluated the licensee's request for relief and the proposed alternative pursuant to 10 CFR 50.55a(a)(3)(i) for the Peach Bottom plant during the current inspection interval.

2.0 DISCUSSION:

Request for Authorization to Implement Alternatives to Code Requirements Contained in Code Case N-546, *Alternative Requirements for Qualification of VT-2 Visual Examination Personnel*

Code Requirement: Section XI, IWA-2300, requires that personnel performing VT-2 and VT-3 visual examinations be qualified in accordance with comparable levels of competency as defined in ANSI N45.2.6. Additionally, the examination personnel shall have natural or corrected near distance vision acuity, in at least one eye, equivalent to a Snellen fraction of 20/20. For far vision, personnel shall have natural or corrected far distance visual acuity of 20/30 or equivalent.

Licensee's Code Relief Request: The licensee has requested approval to implement alternatives to the Code requirements contained in Code Case N-546, *Alternative Requirement for Qualification of VT-2 Examination Personnel*, which is not yet approved by the NRC by reference in RG 1.147.

Licensee's Basis for Relief: (As stated)

> "Code Case N-546 allows experienced plant personnel such as licensed and nonlicensed operators, local leak rate personnel, system engineers, and inspection and nondestructive examination personnel to perform VT-2 visual examinations without having to be certified to comparable levels of competency defined in ANSI N45.2.6. The PECO Energy Company individuals performing the visual examinations will be subject to the conditions provided in Code Case N-546.

Specifically, the examination personnel will have at least 40 hours of plant walkdown experience, receive a minimum of four hours of training on Section XI requirements and plant specific procedures for VT-2 visual examinations, and will pass the vision test requirements of IWA-2321, 1995 edition. In addition to the requirements in Code Case N-546, PECO Energy Company has procedures to assure that consistent VT-2 visual examinations are performed. PECO Energy Company will continue to document the qualifications, training, and visual activity of persons selected to perform the VT-2 examinations and maintain records that verify all of the requirements in the Code Case as specified herein, are met. This alternative to the current code requirements alleviates the need to contract certified VT-2 personnel to perform these examinations and reduces the administrative burden of maintaining an extensive Section XI qualification and certification program for VT-2 examination personnel."

Licensee's Alternate Provisions: (As stated)

"PECO Energy Company will meet the requirements contained in Code Case N-546. Additionally, PECO Energy Company has formal procedures so that consistent VT-2 visual examinations are performed, and will document and maintain records to verify that persons selected as VT-2 examiners are qualified. Use of this code case will provide a comparable level of quality and safety to that currently in place for VT-2 visual examinations."

3.0 EVALUATION:

The ASME Code, Section XI, IWA-2300, requires that VT-2 visual examination personnel be qualified to comparable levels of competency as defined in ANSI N45.2.6. The Code also requires that the examination personnel be qualified for near and far distance vision acuity. PECO Energy Company proposes to implement the alternatives provided in Code Case N-546. In addition, the licensee will implement formal procedures to ensure that consistent VT-2 visual examinations are performed. The licensee will also document and maintain records to verify that persons selected are qualified by meeting the following requirements of Code Case N-546:

1. At least 40 hours plant walkdown experience, such as that gained by licensed and non-licensed operators, local leak rate personnel, system engineers, and inspection and nondestructive examination personnel.

2. At least 4 hours of training on Section XI requirements and plant specific procedures for VT-2 visual examination.

3. Vision test requirements of IWA-2321, 1995 Edition.

The qualification requirements in Code Case N-546 are comparable to those qualifications required for VT-2 visual examiner certification. Furthermore, all licensed and non-licensed operators, local leak rate personnel, system engineers, and inspection and nondestructive examination personnel typically have a sound working knowledge of plant components and piping layouts. Hence, the plant personnel with such background are acceptable candidates for performing VT-2 visual examinations.

Since the licensee will implement formal procedures to obtain consistent VT-2 visual examination results even with the varied experience levels and will document the qualifications, training, and visual acuity of persons selected to perform the VT-2 visual examinations, the proposed alternative will provide an acceptable level of quality.

4.0 CONCLUSION:

Based on a review of Code Case N-546, the staff has determined that the alternatives to the Code qualification requirements for examination personnel, in conjunction with the licensee's added provisions, will provide an acceptable level of quality and safety. Therefore, the licensee's request to implement alternatives provided in Code Case N-546 is authorized pursuant to 10 CFR 50.55a(a)(3)(i). Use of Code Case N-546 is authorized for the current interval at the above mentioned plants, until such time as the Code Case is approved by reference in RG 1.147. At that time, if the licensee intends to continue to implement this Code Case, the licensee is to follow all provisions in Code Case N-546 with limitations issued in RG 1.147, if any.

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