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10 CFR 50.55a

April 30, 2008

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

Subject: Response to Request for Additional Information Concerning Relief Requests Associated with the Fourth Inservice Testing Interval

References:
1) Letter from P. B. Cowan (Exelon Generation Company, LLC) to U. S. Nuclear Regulatory Commission, dated November 28, 2007
2) Letter from J. D. Hughey (U. S. Nuclear Regulatory Commission) to C. G. Pardee (Exelon Generation Company, LLC), dated March 3, 2008
3) Letter from P. B. Cowan (Exelon Generation Company, LLC) to U. S. Nuclear Regulatory Commission, dated March 19, 2008

In the Reference 1 letter, Exelon Generation Company, LLC (EGC) submitted for your review relief requests associated with the Fourth Inservice Testing (IST) Interval for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The fourth interval of the PBAPS, Units 2 and 3 IST program complies with the ASME OM Code, 2001 Edition through 2003 Addenda. Attached is our response to a request for additional information as discussed in a telecon with the U. S. Nuclear Regulatory Commission staff on April 9, 2008.

There are no regulatory commitments contained within this letter.

If you have any questions concerning this letter, please contact Mr. Thomas Loomis at (610) 765-5510.

Sincerely,

Pamela B. Cowan
Director – Licensing & Regulatory Affairs
Exelon Generation Company, LLC

Attachments:
1) Response to Request for Additional Information
2) Revised Relief Request GVRR-1

cc: S. J. Collins, Regional Administrator, Region I, USNRC
F. Bower, USNRC Senior Resident Inspector, PBAPS
J. D. Hughey, Project Manager [PBAPS] USNRC
R. I. McLean, State of Maryland
R. R. Janati, Commonwealth of Pennsylvania

# Attachment 1

# Response to Request for Additional Information

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REGARDING REQUESTS FOR RELIEF ASSOCIATED
WITH THE FOURTH INSERVICE TESTING INTERVAL
PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3
DOCKET NOS. 50-277 AND 50-278

References:
1) Letter from P. B. Cowan (Exelon Generation Company, LLC) to U. S. Nuclear Regulatory Commission, dated November 28, 2007

2) Letter from J. D. Hughey (U. S. Nuclear Regulatory Commission) to C. G. Pardee (Exelon Generation Company, LLC), dated March 3, 2008

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Question:

RAI-03.2) (GVRR-1) Clarify the provision concerning the testing of motor control centers as contained in 6.1 ("Acceptance Criteria") of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda.

Response:

In addition to the information provided in response to RAI-03.2 contained in the Reference 3 letter, the provision to allow for motor control center testing will be excluded from the request. Specifically, a statement will be added to this relief request to exclude the following provision:

> "Motor control center testing is acceptable if correlation with testing at the MOV has been established."

An updated GVRR-1 is attached which includes a statement that excludes this provision. GVRR-1 also reflects changes contained in the Reference 3 letter. Additionally, the title of the updated code case has been revised to reference the 2006 Addenda of the ASME OMb Code, and a reference to the "latest" issuance of 10 CFR 50.55a was removed to avoid future confusion.

Question:

RAI-04) (GVRR-2) Clarify the specific requirements in ASME OM Code ISTC-3522 that relief is being requested and why relief is needed for each requirement.

Response:

Upon further review of the valve testing provisions provided in the ASME OM Code, compliance can be achieved without a relief request. Therefore, relief request (GVRR-2) is being withdrawn.

# Attachment 2

# Revised Relief Request GVRR-1

**Revised Request Number GVRR-1**
**Proposed Alternative**
**In Accordance with 10 CFR 50.55a(a)(3)(i)**
**Alternative Provides Acceptable Level of Quality and Safety**

## Use of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda

### 1. ASME Code Component(s) Affected

All active, non-skid mounted, ASME Class 1, 2 and 3 Motor Operated Valves (MOVs) scoped into the Peach Bottom Atomic Power Station (PBAPS) Inservice Testing Program.

### 2. Applicable Code Edition and Addenda

The applicable code edition and addenda is the ASME OM Code, 2001 Edition through 2003 Addenda. The new interval begins on August 15, 2008, and will conclude on August 14, 2018.

### 3. Applicable Code Requirements

ISTC-3000, "General Testing Requirements", (excluding ISTC-3600)
ISTC-5120, "Motor-Operated Valves"

The provision for motor control center testing contained in Section 6.1 ("Acceptance Criteria") as applied in this relief request is excluded from this request (i.e., "Motor control center testing is acceptable if correlation with testing at the MOV has been established").

### 4. Reason for Request

Pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested from the requirements of OM Code, Subsection ISTC-3000, excluding ISTC-3600 and requested from the requirements of OM Code, Subsection ISTC-5120. The proposed alternative would provide an acceptable level of quality and safety.

### 5. Proposed Alternative and Basis for Use

The Nuclear Regulatory Commission (NRC) in a September 22, 1999, Federal Register Notice (64 FR 51370), issued a Final Rule on 10 CFR Part 50, "Industry Codes and Standards; Amended Requirements." In the final rule, the NRC amended its regulations to incorporate by reference the 1995 Edition and 1996 Addenda of the ASME Code for Operation and Maintenance of Nuclear Power Plants. The final rule also permits the use of alternate rules for IST of MOVs as described in ASME Code Case OMN-1 Rev. 0, in lieu of certain provisions of Subsection ISTC.

10 CFR 50.55a(b) states in part, that Regulatory Guide 1.192, "Operating and Maintenance Code Case Acceptability, ASME Code" (June 2003), has been approved for incorporation by reference. In Regulatory Guide 1.192, it states within Table 2, "Conditionally Acceptable OM Code Cases," that the alternative rules of ASME Code Case OMN-1, Rev. 0, when applied in conjunction with the provisions for leakage rate testing in ISTC-3600, may be applied with the following provisions:

**Use of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda**

1. The adequacy of the diagnostic test interval for each valve must be evaluated and adjusted as necessary but not later than 5 years or three refueling outages (whichever is longer) from initial implementation of ASME Code Case OMN-1.

2. When extending the exercise test intervals for high risk MOVs beyond a quarterly frequency, licensees shall ensure that the potential increase in core damage frequency and risk associated with the extension is small and consistent with the intent of the Commission's Safety Goal Policy Statement.

3. When applying risk insights as part of the implementation of OMN-1, licensees must categorize MOVs according to their safety significance using the methodology described in Code Case OMN-3, "Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants," with the conditions discussed in this regulatory guide or use other MOV risk-ranking methodologies accepted by the NRC on a plant-specific or industry-wide basis with the conditions in the applicable safety evaluations.

This conditional acceptance of OMN-1, Rev. 0, per Regulatory Guide 1.192 is applicable in lieu of the provisions for stroke-time testing in Subsection ISTC of the 1995 Edition, up to and including the 2000 Addenda, of the ASME OM Code.

PBAPS proposes to adopt the requirements of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda, in lieu of the performance of stroke time testing and position indication testing as described by ASME OM ISTC 2001/2003a.

Since Regulatory Guide 1.192 was last published, Code Case OMN-1 has been updated/modified to address and incorporate all of the original Regulatory Guide 1.192 listed provisions.

The PBAPS MOV testing program was developed as a result of Generic Letters (GL) 89-10, "Safety Related Motor Operated Valve Testing and Surveillance," and 96-05, "Periodic Verification of Design Basis Capability of Safety Related Motor Operated Valves," utilizing Topical Report MPR-1807, Rev. 2. PBAPS is currently utilizing MPR-2524-A, "Joint Owners' Group (JOG) Motor Operated Valve Periodic Verification Program Summary," (November 2006) for its MOV Program guidance. The adoption of OMN-1 will consolidate testing between the site's Inservice Testing (IST) and MOV Programs.

**Technical Position**

The following positions describe how the EGC interprets and complies with the various requirements of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda.

**Revised Request Number GVRR-1**
**Proposed Alternative**
**In Accordance with 10 CFR 50.55a(a)(3)(i)**
**Alternative Provides Acceptable Level of Quality and Safety**

**Use of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda**

1. OMN-1, Section 3.1 allows for the use of testing that was conducted prior to the implementation of OMN-1 if it meets the requirements of the Code Case. PBAPS intends to utilize the testing credited under its GL 89-10/96-05 responses to satisfy the requirement for a one-time test to verify the capacity of each individual or group of MOV's safety-related design basis requirements.

2. OMN-1, Section 3.2 requires that each MOV be tested during the preservice test period or before implementing inservice inspection. PBAPS intends to utilize the testing credited under its GL 96-05 response to satisfy this requirement.

3. OMN-1, Section 3.3(b) states that inservice tests shall be conducted in the as-found condition, and activities shall not be conducted if they might invalidate the as-found condition for inservice testing. PBAPS maintenance activities that would affect the as-found condition of the valve, such as motor operator preventive maintenance or stem lubrication, are typically scheduled to occur in conjunction with the performance of the MOV Periodic Verification Testing, and are performed after as-found testing. Any other activities that could affect the as-found test results are not performed until after the as-found testing has been conducted.

4. OMN-1 Section 3.3(c) requires the inservice test program to include a mix of static and dynamic MOV performance testing. PBAPS has utilized the JOG program's mix of static and dynamic MOV performance testing (MPR-2524-A) to develop its current MOV testing program. Additionally, PBAPS will continue to utilize the existing engineering standards, which are consistent with the JOG standards, to justify any changes to the mix of required MOV performance testing. The use of such an evaluation will serve to ensure PBAPS continues to meet this requirement.

5. OMN-1, Section 3.3(e) requires that Remote Position Indication shall be verified locally during inservice testing or maintenance activities. The PBAPS will continue to verify the operability of each MOV's position indication system as part of each MOV's diagnostic test. In addition, the function of each MOV's position indication system will be verified during the performance of maintenance activities affecting remote position indication.

6. OMN-1, Section 3.3.1(b) requires MOV inservice testing to be conducted every 2 refueling cycles or 3 years (whichever is longer), if insufficient data exists to determine inservice test frequencies. PBAPS has sufficient MOV testing data to justify its current testing frequencies, and therefore meets this requirement. If in the future, modification or replacement results in the necessity to re-baseline a valve or group of valves, the requirements of OMN-1 Section 3.3.1(b), or 3.7.2.2(c) as applicable, will be followed.

7. OMN-1, Section 6.4.4 requires that calculations for determining the MOV's functional margin are evaluated to account for potential performance-related degradation. The PBAPS MOV Program, including the corporate MIDAS

**Use of Code Case OMN-1 from the ASME OMb Code, 2006 Addenda**

Software (or similar updated product), takes into account performance-related degradation, to calculate valve margin.

8. The provision for motor control center testing contained in Section 6.1 ("Acceptance Criteria") as applied in this relief request is excluded from this request (i.e., "Motor control center testing is acceptable if correlation with testing at the MOV has been established").

## 6. Duration of Proposed Alternative

This proposed alternative will be utilized for the fourth ten-year interval.

## 7. Precedents

A similar relief was approved for LaSalle County Station, Units 1 and 2, Relief Request RV-02, in NRC Safety Evaluation Report dated September 26, 2007.