Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

September 22, 2003

10 CFR 50.54(f)

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

Gentlemen:

In the Matter of	)	Docket No. 50-327
Tennessee Valley Authority	)	50-328
		50-390

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2 AND WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - THIRTY-DAY RESPONSE TO NRC BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY," DATED AUGUST 21, 2003

This letter provides TVA's 30-day response to the subject bulletin for SQN and WBN. Item 1.0 (a) and (b) of the bulletin requested that Pressure Water Reactor addressees that will enter refueling outages before December 31, 2003 provide, within 30 days, a description of the reactor pressure vessel lower head penetration program that has been implemented at their plant and a description of the addressees' inspection plans that will be implemented during their upcoming refueling outages.

TVA is a member of the Materials Reliability Project Alloy 600 Issue Task Group which has developed guidance (i.e., response outline) for developing a response to NRC Bulletin 2003-02. Accordingly, TVA has utilized the information/guidance developed by this utility group to respond to this NRC bulletin.

Enclosures 1 and 2 provide TVA's response to the requested information for SQN and WBN, respectively. Enclosure 3 contains the list of regulatory commitments contained in this letter for TVA.

A109

If you have any questions concerning this matter, please contact Terry Knuettel at (423) 751-6673.

Sincerely,

Mark J. Burzynski
Manager
Nuclear Licensing

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 22nd day of September, 2003.

Enclosures
cc (Enclosures):
NRC Resident Inspector
Sequoyah Nuclear Plant
2600 Igou Ferry Road
Soddy-Daisy, Tennessee 37379

NRC Resident Inspector
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

Ms. Margaret H. Chernoff, Project Manager
U.S. Nuclear Regulatory Commission
MS 08 G9
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

Mr. Michael L. Marshall, Jr., Project Manager
U.S. Nuclear Regulatory Commission
MS 08 G9
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

Mr. Luis Reyes, Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, Georgia 30303-8931

ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2

THIRTY-DAY RESPONSE TO NRC BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY," DATED AUGUST 21, 2003

This enclosure contains SQN's thirty-day response to Required Information, Items (1)(a) and (1)(b), of the subject bulletin dated August 21, 2003. SQN's response is due within 30 days since TVA is currently scheduled (November, 2003) to enter a refueling outage (RFO) on Unit 2 prior to December 31, 2003.

NRC REQUEST

1. ***All subject PWR addressees are requested to provide the following information. The responses for facilities that will enter refueling outages before December 31, 2003, should be provided within 30 days of the date of this bulletin:***

   (a) A description of the RPV lower head penetration inspection program that has been implemented at your plant. The description should include when the inspections were performed, the extent of the inspections with respect to the areas and penetrations inspected, inspection methods used, the process used to resolve the source of findings of any boric acid deposits, the quality of the documentation of the inspections (e.g., written report, video record, photographs), and the basis for concluding that your plant satisfies applicable regulatory requirements related to the integrity of the RPV lower head penetrations.

RESPONSE

As discussed in TVA's response to Question 5 of the NRC Bulletin 02-01 request for additional information on SQN's Boric Acid Inspection Programs,[1] SQN routinely performs inspections underneath the Reactor Pressure Vessel (RPV) as part of the ASME Section XI system leakage test. Inspections of the RPV lower head penetrations have been performed during each RFO with the reactor coolant system (RCS) at normal operating pressure and the insulation in place. TVA's inspection procedure requires that an entry be made in the keyway to examine for evidence of leakage. This is a visual examination

(VT-2) performed by personnel certified by the TVA Non-Destructive Examination (NDE) Personnel Qualification Program or under ASME Section XI Code Case N-546, Alternative Requirements for Qualification of VT-2 Examination Personnel, Section XI, Division 1. Insulation is not removed for this inspection unless evidence of leakage is found. These inspections are performed in accordance with SQN's site instruction titled, "Leakage Test of the Reactor Coolant Pressure Boundary," and are documented on a system pressure test report in accordance with TVA's ASME Section XI Program. To date, no evidence of pressure boundary leakage has been identified during the performance of this examination.

WCAP-13006, "Alloy 600 Primary Water Stress Corrosion Cracking (PWSCC) Assessments of SQN 1 and 2 Reactor Vessel Bottom Head Penetrations," addresses the potential for PWSCC occurring in the RPV bottom head penetrations. This WCAP concludes that the bottom head penetrations have a low susceptibility for PWSCC and, therefore, have not routinely been inspected with bare metal visual (BMV) techniques at SQN.

During the Unit 1 Cycle 12 RFO, SQN performed remote (VT) examinations on the RPV lower head and bottom mounted instrumentation (BMI) penetrations. SQN has 58 lower head BMI penetrations. The examinations were performed on March 19, 2003 by TVA's Inspection Services Organization and Vistas Corporation. The extent of this examination was 100 percent of the RPV lower head BMI penetrations and the lower head surface.

TVA utilized remote VT equipment to examine the RPV lower head penetrations. The remote examinations were performed with a magnetic crawler device outfitted with three high resolution color cameras, each having adjustable light emitting diode lighting arrays. The cameras were located on the front, rear, and top of the remote crawler. The top mounted camera had pan and tilt capabilities. The visual examination process utilized enhanced VT-2 methodology. Camera resolution was established on characters less than or equal to .105-inches high which is representative of VT-3 sensitivity.

The examinations were recorded on Digital 8 video cassettes for archival and off-line review. All penetration annulus areas and the head surface in the area of the penetrations were examined and digitally recorded. TVA American Society of Non-Destructive Testing CP-189 Level III certified inspectors reviewed and evaluated the data on-line.

An Examination Scan Plan was developed to ensure that visual examinations were performed in a logical sequence, while minimizing radiation exposure and validating positional accuracy. A total of 16 scan sequences were performed to examine all penetrations. During the examination of each penetration, the head area adjacent to the penetrations was also visually examined for boron deposits.

During the initial remote VT examination of the penetrations, areas appearing "white" in or around the penetrations were further examined by gaining access and performing a direct visual examination. These areas, which consisted of staining with no "popcorn like" accumulation, were carefully evaluated during the direct visual examination. These areas were determined to be nonrelevant with no evidence of pressure boundary leakage based on the physical appearance and origin of the stains. The inspection results of these areas are well documented with both written and photographic reports and are retrievable to facilitate review during future examinations.

General corrosion and coating degradation was seen at or around the annular area on most penetrations. These conditions were superficial in nature and not associated with boron originating from the annulus of the penetrations.

TVA's evaluation in response to NRC Bulletin 2002-01[2] concluded that the applicable regulatory requirements are currently being met. This conclusion was based on the fact that SQN's program has established instructions and procedures to implement the required inspections, evaluations, repairs, and analysis of systems and components to maintain the integrity of the RCS boundary. This same approach also applies to the bottom head penetrations.

In summary, TVA did not identify any pressure boundary leakage from the lower head BMI penetrations during the Unit 1 BMV examination. All penetrations were satisfactorily examined with the magnetic crawler. The overall condition of the Unit 1 RPV lower head surface and BMI penetration areas was acceptable. In addition, inspections underneath the RPV that have been performed in accordance with SQN's ASME Section XI System Leakage Test Program during each RFO with the insulation in place have not identified any pressure boundary leakage to date. TVA's current programs regulating the aforementioned inspections at SQN provide compliance with applicable regulatory requirements, including 10 CFR 50, Appendix B, Criterion V: Instructions, Procedures, and Drawings, Criterion IX: Control of Special Processes, and Criterion XVI: Corrective Action.

(b) A description of the RPV lower head penetration inspection program that will be implemented at your plant during the next and subsequent refueling outages. The description should include the extent of the inspections which will be conducted with respect to the areas and penetrations to be inspected, inspection methods to be used, qualification standards for the inspection methods, the process used to resolve the source of finding of boric acid deposits or corrosion, the inspection documentation to be generated, and the basis for concluding that your plant will satisfy applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

RESPONSE

TVA performs a RCS system leakage test on both SQN units in accordance with ASME XI each RFO. At that time, an entry is made in the keyway and the area underneath the RPV is examined for evidence of leakage. This is a visual examination (VT-2) performed by personnel certified by the TVA NDE Personnel Qualification Program or under ASME Section XI Code Case N-546.

In addition, TVA will perform a BMV examination of the lower head BMIs during the SQN Unit 2 Cycle 12 RFO (fall 03). TVA will also revise the Corrosion Control Program to require performance of this BMV examination of the lower head BMIs on both units during each RFO until ASME Code changes or regulatory action justify a change in this frequency. This inspection includes all 58 BMI penetrations and includes 100 percent of the circumference of each penetration as it enters the reactor vessel lower head. The following provides a description of planned revisions to TVA's Corrosion Control Program to address inspection of the lower reactor head.

TVA's BMV examination of the lower head BMIs will be performed either directly or with remote equipment. The visual examination process will utilize enhanced methodology. The direct inspection method used by TVA has VT-3 resolution capabilities and the conditions identified during the examination are documented in a written report supplemented with photographic images. TVA's remote inspections consist of outfitting remote equipment with high resolution color cameras to examine the RPV lower head penetrations. Camera resolution will be established on characters less than or equal to 0.105 inches high which is representative of VT-3 sensitivity. A direct visual examination may supplement the remote examination provided the examiner is able to resolve the 0.105-inch characters at the examination distance.

The remote examinations will be video recorded for archival and off-line review. The penetration annulus area and the head surface in the area of the penetrations will be examined and digitally recorded.

TVA plans to develop an Examination Scan Plan similar to that developed for SQN Unit 1 to ensure that SQN Unit 2 visual examinations are performed in a logical sequence, while minimizing radiation exposure and validating positional accuracy. During the examination of all 58 lower head penetrations, the head area adjacent to each penetration will also be visually examined for boron deposits.

Any areas deemed suspect during the initial remote VT examination of the penetrations will be further examined by gaining access and

performing a direct visual examination. In these cases, an evaluation will be performed to determine the physical appearance and origin of the suspect area.

TVA will utilize the "in-house" Corrective Action Program and Corrosion Control Program to evaluate findings of leakage during the BMI penetration examination. The process includes an evaluation to determine if the findings of leakage are relevant by identifying the source of the leakage. Examples of relevant leakage are identified in the March 2002 Electrical Power Research Institute report supplemented by the as found pictures of the boric acid accumulation at South Texas Project Unit 1 (STP-1) at BMI locations #1 and #46 available on the NRC web site. Unlike the reactor vessel head upper penetrations, the bottom head location has no potential pressure boundary leak source location (e.g., canopy/conoseal leaks) during normal plant operation that could result in boron accumulation.

Cavity seal ring leakage, which occurs during a RFO, only occurs at low temperature and results in staining without "popcorn like" accumulation features of an RCS leak at normal operating temperature. The lower head location of the BMI penetrations is also not likely to be affected by settled debris that could mask a VT-2 examination. Tools to evaluate relevant indications of leakage (boron accumulation) would, in most cases, include sample collection for chemical and isotopic analysis.

Examples of nonrelevant leakage may include thin films or stains of boron or light surface rust having a characteristic of no discernable thickness with no accumulation around the penetration. Nonrelevant indications would typically have a trail leading to the source which is away from the BMI penetration. Thin film boron stains or light rust films are not likely to be chemically or isotopically analyzed due to there being insufficient accumulation for a sample.

The examinations will be documented in a detailed report and will include the results of each penetration examined including any inaccessible areas and the degree and cause of the inaccessibility. Video and/or photographic images to support the examination findings will supplement the report. TVA stores documentation (i.e.,

results of these examinations to ensure that the results are retrievable to facilitate reviews during future examinations.

CONCLUSION SUMMARY STATEMENT

Based on the evaluation of TVA's RPV Lower Head Penetration Program described above, TVA considers there is reasonable assurance that the program implemented at SQN satisfies the applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

REFERENCES:

1. TVA's January 24, 2003, SQN and WBN 60-Day Responses to NRC Request for Additional Information (RAI) to Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated November 21, 2002.

2. TVA's April 2, 2002, 15-Day SQN Response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated March 18, 2002.

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT (WBN)
UNIT 1

THIRTY-DAY RESPONSE TO NRC BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY," DATED AUGUST 21, 2003

This enclosure contains WBN's thirty-day response to Required Information, Items (1)(a) and (1)(b), of the subject bulletin dated August 21, 2003. WBN's response is due within 30 days since TVA entered the Unit 1 Cycle 5 refueling outage (RFO) on September 8, 2003.

NRC REQUEST

1. ***All subject PWR addressees are requested to provide the following information. The responses for facilities that will enter refueling outages before December 31, 2003, should be provided within 30 days of the date of this bulletin:***

   (a) A description of the RPV lower head penetration inspection program that has been implemented at your plant. The description should include when the inspections were performed, the extent of the inspections with respect to the areas and penetrations inspected, inspection methods used, the process used to resolve the source of findings of any boric acid deposits, the quality of the documentation of the inspections (e.g., written report, video record, photographs), and the basis for concluding that your plant satisfies applicable regulatory requirements related to the integrity of the RPV lower head penetrations.

RESPONSE

As discussed in TVA's response to Question 5 of the NRC Bulletin 2002-01 request for additional information on WBN's Boric Acid Inspection Program,[1] WBN routinely performs inspections underneath the Reactor Pressure Vessel (RPV) as part of the ASME Section XI system leakage test. Inspections of the RPV lower head penetrations have been performed since start-up during each RFO with the reactor coolant system (RCS) at normal operating pressure and the insulation in place. This is a visual examination (VT-2) performed by personnel certified by the TVA Non-Destructive Examination (NDE) Personnel Qualification Program or under ASME Section XI Code Case

N-546, Alternative Requirements for Qualification of VT-2 Examination Personnel, Section XI, Division 1. TVA's inspection procedure requires that an entry be made in the keyway to examine for evidence of leakage. These inspections are performed in accordance with WBN site instruction titled, "Reactor Coolant System Leakage Test," and are documented on a system pressure test report in accordance with TVA's ASME Section XI program. A review of the inspection results indicate the system pressure tests have not identified any bottom mounted instrumentation (BMI) leakage to date, nor have any indications of pressure boundary leakage been identified.

WCAP-13006, "Alloy 600 PWSCC Assessments of SQN 1 and 2 Reactor Vessel Bottom Head Penetrations," addresses the potential for primary water stress corrosion cracking occurring in the RPV bottom head penetrations. This WCAP, which is applicable because of the design similarities between SQN and WBN, concludes that the bottom head penetrations have a low susceptibility for PWSCC and therefore, have not routinely been inspected at WBN. The commitments to perform future visual inspections of the entire bottom head, as described in response to Section 1(b) of the subject bulletin, will provide increased confidence that boric acid degradation problems experienced at other plants have not occurred at WBN.

During the Unit 1 Cycle 5 RFO, WBN performed remote (VT) bare metal visual (BMV) examinations on the RPV lower head and BMI penetrations. WBN has 58 lower head BMI penetrations. The examinations were performed on September 10 and 11, 2003 by TVA's Inspection Services Organization and Remote Operated Vehicle Technologies. The extent of this examination was 100 percent of the RPV lower head BMI penetrations and the lower head surface.

TVA utilized remote VT equipment to examine the RPV lower head penetrations. The remote examinations were performed with a track crawler device outfitted with a high resolution articulating remote zoom color camera having adjustable light emitting diode lighting arrays. A stationary camera was used to assist in positional verification. The visual examination process utilized enhanced VT-2 methodology. Camera resolution was established on characters less

than or equal to .105 inches high which is representative of VT-3 sensitivity.

The examinations were recorded on super vertical helix scan video cassettes for archival and off-line review. All penetration annulus areas and the head surface in the area of the penetrations were examined and recorded. TVA American Society of Non-Destructive Testing CP-189 Level III certified inspectors reviewed and evaluated the data on-line.

An Examination Scan Plan was developed to ensure that visual examinations were performed in a logical sequence, while minimizing radiation exposure and validating positional accuracy. A total of 15 scan sequences were performed to examine all penetrations. During the examination of each penetration, the head area adjacent to the penetrations was also visually examined for boron deposits.

General corrosion and coating degradation was seen at or around the annular area on most penetrations and on the bottom head surface. These conditions appear superficial in nature and are not associated with boron originating from the annulus of the penetrations. TVA is currently evaluating this condition on the bottom head in accordance with WBN's Corrosion Control Program.

TVA's evaluation in response to NRC Bulletin 2002-01[2] concluded that the applicable regulatory requirements are currently being met. This conclusion was based on the fact that WBN's program has established instructions and procedures to implement the required inspections, evaluations, repairs, and analysis of systems and components to maintain the integrity of the RCS boundary. This same approach also applies to the bottom head penetrations.

In summary, TVA did not identify any pressure boundary leakage from the lower head BMI penetrations during the Unit 1 Cycle 5 BMV examination. All penetrations were satisfactorily examined with the track crawler. The overall condition of the Unit 1 RPV lower head surface will be evaluated under TVA's Corrosion Control Program. In addition, inspections underneath the RPV that have been performed during each RFO with the insulation in place in accordance with WBN's ASME Section XI System Leakage Test Program have not

identified any pressure boundary leakage to date. TVA's current programs regulating the aforementioned inspections at WBN provide compliance with applicable regulatory requirements, including 10 CFR 50, Appendix B, Criterion V: Instructions, Procedures, and Drawings, Criterion IX: Control of Special Processes, and Criterion XVI: Corrective Action.

(b) A description of the RPV lower head penetration inspection program that will be implemented at your plant during the next and subsequent refueling outages. The description should include the extent of the inspections which will be conducted with respect to the areas and penetrations to be inspected, inspection methods to be used, qualification standards for the inspection methods, the process used to resolve the source of finding of boric acid deposits or corrosion, the inspection documentation to be generated, and the basis for concluding that your plant will satisfy applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

RESPONSE

TVA performs a RCS system leakage test on WBN Unit 1 in accordance with ASME XI each RFO. At that time, an entry is made in the keyway and the area underneath the RPV is examined for evidence of leakage. This is a VT-2 examination performed by personnel certified by the TVA NDE Personnel Qualification Program or under ASME Section XI Code Case N-546.

In addition, TVA will revise the Corrosion Control Program to perform a BMV examination of the lower head BMIs during each WBN Unit 1 RFO until ASME Code changes or regulatory action justify a change in this frequency. This inspection includes all 58 BMI penetrations and includes 100 percent of the circumference of each penetration as it enters the reactor vessel lower head. The following provides a description of the planned revisions to TVA's

Corrosion Control Program to address inspection of the lower reactor head.

TVA's BMV examination of the lower head BMIs will be performed either directly or with remote equipment. The visual examination process will utilize enhanced methodology. The direct inspection method used by TVA has VT-3 resolution capabilities and the conditions identified during the examination are documented in a written report supplemented with photographic images. TVA's remote inspections consist of outfitting remote equipment with high resolution color cameras to examine the RPV lower head penetrations. Camera resolution will be established on characters less than or equal to 0.105-inch high, which is representative of VT-3 sensitivity. A direct visual examination may supplement the remote examination provided the examiner is able to resolve the 0.105-inch characters at the examination distance.

The remote examinations will be video recorded for archival and off-line review. The penetration annulus area and the head surface in the area of the penetrations will be examined and digitally recorded.

TVA plans to continue using an Examination Scan Plan during future inspections, similar to the plan used during the Unit 1 Cycle 5 RFO, to ensure that visual examinations are performed in a logical sequence, while minimizing radiation exposure and validating positional accuracy. During the examination of all 58 lower head penetrations, the head area adjacent to each penetration will also be visually examined for boron deposits.

Any areas deemed suspect during the initial remote VT examination of the penetrations will be further examined by gaining access and performing a direct visual examination. In these cases, an evaluation will be performed to determine the physical appearance and origin of the suspect area.

TVA will utilize the "in-house" Corrective Action Program and Corrosion Control Program to evaluate any findings of leakage during the BMI penetration examination. The process includes an evaluation to determine if the findings of leakage are relevant by identifying

the source of the leakage. Examples of relevant leakage are identified in the March 2002 Electrical Power Research Institute report supplemented by the as found pictures of the boric acid accumulation at South Texas Project Unit 1 (STP-1) at BMI locations #1 and #46 available on the NRC web site. Unlike the reactor vessel head upper penetrations, the bottom head location has no potential pressure boundary leak source location (e.g., canopy/conoseal leaks) during normal plant operation that could result in boron accumulation.

Cavity seal ring leakage, which occurs during a RFO, only occurs at low temperature and results in staining without "popcorn like" accumulation features of an RCS leak at normal operating temperature. The lower head location of the BMI penetrations is also not likely to be affected by settled debris that could mask a VT-2 examination. Tools to evaluate relevant indications of leakage (boron accumulation) would, in most cases, include sample collection for chemical and isotopic analysis.

Examples of nonrelevant leakage may include thin films or stains of boron or light surface rust having a characteristic of no discernable thickness with no accumulation around the penetration. Nonrelevant indications would typically have a trail leading to the source which is away from the BMI penetration. Thin film boron stains or light rust films are not likely to be chemically or isotopically analyzed due to there being insufficient accumulation for a sample.

The examinations will be documented in a detailed report and will include the results of each penetration examined including any inaccessible areas and the degree and cause of the inaccessibility. Video and/or photographic images to support the examination findings will supplement the report. TVA stores documentation (i.e., detailed reports, video and/or photographic images, etc.) of the results of these examinations to ensure that the results are retrievable to facilitate reviews during future examinations.

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT (WBN)
UNIT 1

THIRTY-DAY RESPONSE TO NRC BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY," DATED AUGUST 21, 2003

CONCLUSION SUMMARY STATEMENT

Based on evaluation of TVA's RPV Lower Head Penetration Program described above, TVA considers there is reasonable assurance that the program implemented at WBN satisfies the applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

REFERENCES:

1. TVA's January 24, 2003, SQN and WBN 60-Day Responses to NRC Request for Additional Information (RAI) to Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated November 21, 2002.

2. TVA's April 2, 2002, 15-Day WBN Response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated March 18, 2002.

ENCLOSURE 3

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2
WATTS BAR NUCLEAR PLANT (WBN) UNIT 1

THIRTY-DAY RESPONSE TO NRC BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY," DATED AUGUST 21, 2003

SUMMARY OF COMMITMENTS

SQN Commitments:

1. TVA will perform a remote bare metal visual (BMV) examination of the Unit 2 bottom mounted instrumentation (BMI) penetrations during the SQN Unit 2 Cycle 12 refueling outage (RFO) (fall 03).

2. TVA will revise the Corrosion Control Program to require the performance of a BMV examination of the lower head BMIs on both units during each RFO until ASME Code changes or regulatory action justify a change in this frequency.

WBN Commitments:

1. TVA will revise the Corrosion Control Program to require the performance of a BMV examination of the lower head BMI penetrations during each WBN Unit 1 RFO until ASME Code changes or regulatory action justify a change in this frequency.