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SUBJECT: Forwards rev to commitments to provide continuous indication of containment pressure,piece part component qualification & cable separation for non-divisional cables on Q-list.

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Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

October 25, 1995

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

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, AND 3 - REVISION TO COMMITMENTS TO PROVIDE CONTINUOUS INDICATION OF CONTAINMENT PRESSURE, PIECE PART COMPONENT QUALIFICATION, AND CABLE SEPARATION FOR NON-DIVISIONAL CABLES ON THE Q-LIST

BFN is a participant in a pilot program for managing NRC commitments. This program uses guidelines developed by the Nuclear Energy Institute (NEI) which include a uniform process for changing commitments. The NEI guidelines provide for timely notification to the NRC when changing commitments which meet specified criteria. Where timely notification is required, the guidelines recommend this notification be accomplished by supplementing the docketed correspondence containing the original commitment.

Four commitments, originating from the referenced correspondence and described in the enclosure, have been evaluated for revision using the NEI Guidelines. Results of these evaluations indicate the revision of these commitments is justified. This letter provides the results of our evaluations and provides notification of the revision of these commitments.

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There are no commitments contained in this correspondence. If you have any questions, please contact me at (205) 729-2636.

Sincerely,

Pedro Salas
Manager of Site Licensing

Enclosure
cc (Enclosure):
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REFERENCES:

1. TVA letter to NRC dated April 26, 1982, in regards to NUREG-0737, Items II.F.1.4, II.F.1.5, and II.F.1.6

2. TVA letter to NRC dated April 30, 1984, in regards to Regulatory Guide 1.97 requirements and implementation plans for Browns Ferry Nuclear Plant

3. TVA letter to NRC dated October 24, 1988 "Browns Ferry Nuclear Plant (BFN)- Nuclear Performance Plan, Revision 2"

4. TVA letter to NRC dated May 10, 1991, "Browns Ferry Nuclear Plant (BFN) - Action Plant to Disposition Concerns Related to Units 1 and 3 Cable Installation Issues Including Cable Separations"

ENCLOSURE

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, 3

REVISION TO COMMITMENTS

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1. Provide Continuous Indication Of Containment Pressure

Current Commitment Statement: NUREG-0737, Item II F.1.4 - Provide Continuous Indication of Containment Pressure. TVA interprets this commitment to require the installation of a Westinghouse VX252 indicator, L&N Speedmax 100 recorder, and Rosemount 1153-GA-5 and 1153-GA-8 transmitters, with the accuracies and response times specified in the April 26, 1982 letter.

Revised Commitment Statement: TVA will provide continuous indication of containment pressure. The loop accuracies and response times shall be adequate to meet the intended function of the instrumentation.

Source Document: TVA letter to NRC, dated April 26, 1982, regarding NUREG 0737 Item II.F.1.4, II.F.1.5, and II.F.1.6

Affected Unit: 3

Basis for Commitment Change: NUREG-0737 Item II F.1.4 required TVA to provide continuous indication of containment pressure. In the letter dated April 26, 1982, TVA provided specific information regarding the instrumentation including manufactures name, model, and accuracy. The instruments specified in the response have become obsolete. TVA has installed upgraded instrumentation. The current installed instrumentation meets the requirements of both NUREG-0737 Item II.F.1.4 and Regulatory Guide 1.97 criteria. BFN Unit 3 specific Setpoint and Scaling Calculations provide an analysis of the acceptability of the accuracy and response time for normal, abnormal, and post accident operation for the upgraded containment pressure monitoring equipment.

2. Upgrade Drywell Temperature And Pressure Monitors To Meet Environmental Qualification (EQ) And Regulatory Guide 1.97 Requirements.

Current Commitment Statement: Upgrade Drywell Temperature and Pressure Monitors to meet EQ and Regulatory Guide 1.97 requirements. The letter from TVA to NRC dated April 30, 1984 specifies requirements for installation of Regulatory Guide 1.97 instrumentation but notes that NUREG-0737 requirements will overrule if they differ.

For drywell pressure monitoring, NUREG-0737 Item II.F.1.4 applies. In TVA's April 26, 1982 letter, TVA provided specific information associated with Item II.F.1.4 for the drywell pressure monitoring instrumentation, including manufacture model number and accuracy.

Revised Commitment Statement: In response to NUREG-0737, Item II.F.1.4, TVA will provide continuous indication of containment pressure (Drywell Pressure). The loop accuracies and response times shall be adequate to meet the intended function of the instrumentation.

Source Documents: TVA letter to NRC, dated April 26, 1982, regarding NUREG-0737, Items II.F.1.4, II.F.1.5, and II.F.1.6. TVA letter to NRC, dated April 30, 1984, in regards to Regulatory Guide 1.97 requirements and implementation plans for BFN.

Affected Unit: 3

Basis for Commitment Change: The instrumentation specified in TVA's April 26, 1982 letter for monitoring drywell pressure has become obsolete. TVA has installed upgraded instrumentation. The installed instrumentation meets the requirements of both NUREG-0737, Item II.F.1.4, and Regulatory Guide 1.97. BFN Unit 3 specific Setpoint and Scaling Calculations provide an analysis of the acceptability of the accuracy and response time for normal, abnormal and post accident operation of the upgraded drywell pressure monitoring instrumentation.

3. <u>Component and Piece Part Qualification</u>

Current Commitment Statement:

- Perform an evaluation of the safety related replacement items that have been installed in safety related applications other than 10 CFR 50.49 systems.

- Perform an evaluation of remaining inventoried commercial grade spare parts to assure that their subsequent use will not degrade previously qualified equipment.

Revised Commitment Statement: [The commitment regarding installed items is being withdrawn based upon changes in regulatory focus since 1988, actions taken by TVA, and lessons learned from other nuclear units.]

- Establish administrative controls to ensure that in-stock commercial grade items will not be issued for installation in a safety-related application unless they have been evaluated in accordance with Site Standard Practice (SSP)-10.5 or Technical Instruction (TI)-329.

Source Document: TVA letter to NRC dated October 24, 1988, "Browns Ferry Nuclear Plant (BFN) - Nuclear Performance Plan, Revision 2," Section 12.0, "Component and Piece Part Qualification"

Affected Units: 1, 2, and 3

Basis for Commitment Change:

Background

When the BFN Nuclear Performance Plan (NPP) was submitted in October 1988, it had been identified that TVA's procurement program could allow previously qualified equipment to be degraded by purchasing replacement components and parts as commercial grade, without documentation of its qualification and without adequate dedication of the items by TVA. During this time period (1986-1989), NRC inspections also identified a common, broad programmatic deficiency in licensee's control over the procurement process and dedication of commercial grade items. The findings of these inspections, resulted in NRC-endorsed Electric Power Research Institute (EPRI) guidance, the Nuclear Utility Management and Resources Council (NUMARC) Comprehensive Procurement Initiative, and subsequent issuance of NRC Generic Letter (GL) 91-05, "Licensee Commercial-Grade Procurement and Dedication Programs."

TVA's method for complying with the original commitment was to perform reviews of both installed and inventoried commercial grade items, identify their safety-related end uses, and evaluate the items for those applications. These reviews began in 1991 and are still ongoing.

The purpose of this revision is to focus actions on the control and disposition of actual inventoried items in lieu of continuing reviews, examinations, and/or augmentation of existing procurement documentation associated with installed items.

Basis for withdrawal of commitment regarding installed items

The original commitment approach was formulated when the impact on qualification of the host components and plant safety at BFN and throughout the industry had not been firmly established. Therefore, the commitment included review of past procurements for items installed in the plant, as well as items still in inventory. Since that time, however, GL 91-05 was issued which clearly established that licensees were not expected to review all past procurements unless problems with a specific vendor or supplier product was found during current procurement activities. TVA's corrective action program has been utilized as appropriate and is consistent with GL 91-05. GL 91-05 recognized prior design adequacy and manufacturer

control of commercial grade items and thus forms a basis recognized by NRC for withdrawing this commitment.

Since the submittal of the BFN NPP, several other changes have also occurred. Primarily, the scope of items has changed because a significant number of items that were installed prior to October 1, 1988 have been removed from service due to extensive design modifications and normal maintenance of plant equipment. Procurements of replacement commercial grade items subsequent to October 1, 1988 have been specified and accepted to be consistent with the industry (EPRI) guidance that was endorsed by NRC in GL 89-02, "Actions to Improve the Detection of Counterfeit and Fraudulently Marketed Products," and later discussed in GL 91-05. As procurement engineering processes improved, the population of remaining items decreased. Since that time, replacement commercial grade items have demonstrated over four years of satisfactory in-plant performance with no adverse trend to suggest that items were replaced due to inherent part defects or non-conformances.

In addition to ongoing improvements of site procurement engineering processes at BFN, numerous activities were implemented to gain additional assurance that installed commercial grade items would perform as designed and not degrade the qualification of their host components. These actions have included evaluations of commercial grade items to determine the extent to which inadequate engineering involvement in the procurement process may have resulted in either the improper classification of items, the incorrect specification of items, or incomplete acceptance documentation; and evaluating the extent commercial grade items were installed in applications other than those for which they were previously evaluated.

The results of evaluations performed to date indicate that only three out of approximately 1300 reviews resulted in items that degraded the original qualification of their host components due to previous procurement processes and documentation. These items were further evaluated under TVA's corrective action program and were determined not to create a plant operability concern. The results of specific reviews indicate that commercial grade items were installed in safety-related applications for which they were evaluated, and quality assurance (QA) Level 3 items (items installed in a safety related component for which it was not originally designed), were suitable for their installed applications.

Using the NRC guidance of GL 91-05 as a fundamental basis and the assurance gained from over four years of satisfactory in-plant performance of remaining commercial grade replacement items installed prior to October 1, 1988, it can be concluded that further review of installed commercial grade items is no longer necessary to ensure that

previously qualified equipment has not been degraded through the use of these items. Therefore, the original concern identified in the BFN NPP has been resolved. Continuous improvements made to BFN procurement processes since October 1, 1988, extensive site-specific evaluations of past procurements performed to date, and lessons learned from similar evaluations in the nuclear industry since 1988 support these conclusions.

Basis for revision of commitment regarding inventory items

This commitment addresses commercial grade items (QA Level 2 items) which are in inventory and intended for safety-related application. The substance of the commitment remains unchanged because the revision simply clarifies the original commitment and provides more detail to facilitate completion.

The revision allows completion of the commitment by using administrative controls which prevent issue of commercial grade items for safety-related applications unless they have been evaluated for those specific end uses. Controls which could be applied to the items include downgrading, surplusing, or use of administrative holds.

The revision also specifies that technical evaluations will meet either plant-approved procedure SSP-10.5, "Technical Evaluation for Procurement of Materials and Services," or TI-329, "Evaluation of Components and Piece Parts Procured Prior to the Implementation of BFN Commercial Grade Dedication Program." SSP-10.5 is the process by which safety/quality-related items are currently procured, and meets current industry guidance. TI-329 is a procedure developed to evaluate past procurements (prior to October 1, 1988) of commercial grade items for use in safety-related applications.

The revision also clarifies that the review will comprise 100 percent of items intended for safety-related applications, whereas the previous commitment wording is less specific. The revised commitment is more specific, more suited for closure, and bounds the intent of the previous commitment wording.

4. Cable Separation For Non-Divisional Cables on the Q-list

Current Commitment Statement: For Units 1 and 3, the Q-List will establish a list of equipment and device IDs for safety related and quality related systems. Subsequently, circuit block diagrams will be analyzed to identify each cable required in support of the "Q" device functions. The resultant cable list will be compared against the cable data base to determine if it is correctly identified as divisional. If it is determined that a change in divisional status is required, the respective cables will be evaluated

against the separation criteria. Corrective actions for Units 1 and 3 will be implemented prior to the restart of the respective unit.

Revised Commitment Statement: For Unit 3 non-divisional V1, V2, V3, V4 and V5 cables contained in the project Q-list, cable separation issues will be resolved as follows:

- Create a list of the non-divisional cables from the completed Q-List.

- Compare the non-divisional cables in the Q-List against the separation design criteria and determine if cables are correctly identified as non-divisional or are required to be upgraded to divisional.

- If it is determined that a change in divisional status is required, the appropriate design documentation will be revised to reflect the correct cable division.

- If it is determined that a separation concern exists, modifications will be performed in accordance with the separations criteria to correct the concern and will be completed prior to Unit 3 restart.

Source Document - 1991 Letter from TVA to NRC dated May 10, 1991, "Browns Ferry Nuclear Plant (BFN) - Action Plan to Disposition Concerns Related to Units 1 and 3 Cable Installation Issues Including Cable Separation"

Affected Unit: Unit 3

Basis for Commitment Change - The purpose of this commitment was to ensure that Unit 3 cable separations are acceptable after completion of the Unit 3 Q-list. The concern was that Q-list could upgrade previously non-divisional cables to be safety-related and these cables could require divisional separation. The revision to this commitment accomplishes this purpose in an alternate manner.

The change to this commitment accomplishes three things. First, it separates the Q-List upgrade from this cable evaluation commitment activity. The new Q-List is a distinct activity and is tracked separately. The Q-List includes safety-related and quality related cables as listed components. Divisional and non-divisional cables are identifiable as such in the Q-List. Consequently, there is no need to independently develop a list of safety-related non-divisional cables for evaluation.

Second, this change eliminates the requirement to use block diagrams to identify safety or quality related cables. Block diagrams may be analyzed for selected circuits and may be used on a limited basis for this evaluation. However, the analysis of block diagrams is not necessary for all the

equipment and device IDs. Other methods can be used to identify the cables associated with these components.

Third, this change eliminates the comparison against the cable data base to determine if a cable is correctly identified as divisional. In lieu of limiting the evaluations to cables requiring a change in divisional status, each non-divisional cable in the Q-List was evaluated against the separation design criteria.