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SUBJECT: Provides addl info re NRC review of TVA plans & prerequisites for reloading fuel in facility.

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U.S. Nuclear Regulatory Commission
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Gentlemen:

In the Matter of) Docket No. 50-260
Tennessee Valley Authority)

BROWNS FERRY NUCLEAR PLANT (BFN) - PREREQUISITES FOR RELOADING FUEL IN BFN UNIT 2

References: (1) TVA letter from R. L. Gridley to NRC dated July 6, 1988, "Browns Ferry Nuclear Plant (BFN) - Prerequisites for Reloading Fuel in BFN Unit 2"

(2) NRC letter from S. D. Richardson to Mr. S. A. White dated July 27, 1988, "Fuel Load Issues and Power Ascension Testing for Browns Ferry (BFN) Unit 2"

(3) NRC meeting summary dated September 29, 1988 documenting results of meeting with TVA on September 13, 1988

TVA has presented its plans (reference 1) for ensuring that BFN technical programs and corrective actions have progressed to the point that the plant and the systems required for fuel loading are operable in accordance with BFN unit 2 technical specifications. This letter provides the additional information requested by NRC as a part of its review of TVA's plans and prerequisites for reloading fuel into the BFN unit 2 reactor. Included in this submittal are:

- A description of TVA's process for performing engineering evaluations of systems required for fuel load including the technical basis for declaring systems operable for the purpose of reloading and maintaining fuel in the reactor, and the guidelines for deferring work items. (Enclosure 1)

- A discussion of the status of TVA's special programs is provided with a justification for not completing one such program through the discovery phase before fuel load. (Enclosure 2)

- A description of the fuel load prerequisite check list procedure. (Enclosure 3)

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- A description of the work control process during and after fuel loading operations. (Enclosure 4)
- A description of the independent review of the system evaluations to return systems to service. (Enclosure 5)
- An Evaluation for technical specification changes or exemptions required to support fuel load, and
- TVA's response to questions set forth in NRC's July 27, 1988 letter (Reference 2) to TVA on this subject. (Enclosure 6)

BACKGROUND

NRC and TVA have held several meetings and exchanged correspondence regarding TVA's plans for reloading fuel into the BFN Unit 2 reactor. The most recent meeting was held on September 13, 1988. In this meeting, TVA summarized the approach, methods, and control measures for ensuring that BFN systems required to be operable during fuel handling operations and while fuel is in the reactor would meet technical specification requirements. TVA also described the technical basis for the engineering evaluations which support the System Preoperability Checklist (SPOC) used to assess the operability of plant systems. NRC and TVA reached several understandings at the September 13, 1988 meeting. These understandings are documented in NRC's record of the meeting docketed September 29, 1988 (reference 3).

OVERVIEW OF PROCEDURES FOR RETURNING SYSTEMS TO SERVICE

TVA has procedures in place to return systems to service. A site procedure is being developed to verify that all prerequisites for commencing fuel loading have been completed. The procedures that govern these activities are the following Site Directors Standard Practices (SDSP) and Browns Ferry Engineering Project - Project Instructions (BFEP-PI):

1. BFEP-PI 88-07 "System Plant Acceptance Evaluation"
2. SDSP 12.4 "Return to Service and Closure of Modifications"
3. SDSP 12.7 "System Preoperability Checklist (SPOC)"
4. SDSP 12.9 "Fuel Load Prerequisite Checklist" (in final review)

TVA's July 6, 1988 letter to NRC (Reference 1) described the BFN system return to service process and the procedural requirements for preparation of completed SPOC packages as prescribed by SDSP 12.4 and 12.7. Since the time of that letter, TVA has since revised SDSP 12.7, issued the engineering project procedure (BFEP PI 88-07) and is preparing the Fuel Load Prerequisite Checklist procedure (SDSP 12.9). This procedure will verify the completion of corrective actions and resolution of technical and licensing issues. The key elements which will be included in SDSP 12.9 are described in enclosure 3.

DESCRIPTION OF THE ENGINEERING SYSTEM EVALUATIONS AND TECHNICAL BASIS FOR DECLARING SYSTEMS OPERABLE

The BFN engineering project procedure (BFEP-PI 88-07) for performing the engineering evaluation of a given system includes a detailed review of the projected system functional configuration to ensure the integrity of the system safety functions. The review also includes an evaluation of design changes to assess the effect of the changes on the system. The resulting evaluation package includes a list of items required to be complete before fuel loading, ensures that primary drawings are updated and issued to the control room, and concludes with a safety evaluation of the system functional configuration. The system safety evaluation ensures that there are no unreviewed safety questions when systems are declared operable. A description of the procedure and the guidelines used for work item deferral, including the technical bases for declaring systems operable for fuel loading, are provided in enclosure 1 to this letter.

STATUS OF BFN TECHNICAL PROGRAMS

Browns Ferry Nuclear Performance Plan (BFNPP) Volume 3, Section III, describes a number of special programs which are being implemented at BFN as part of TVA's overall restart corrective actions. Most technical programs are nearing completion; however, at fuel loading one program (Seismic Qualification of Large Bore Piping and Supports to NRC IE Bulletins 79-02 and 79-14 requirements) will not have the discovery phase complete.

Enclosure 2 provides a discussion of the status of that program and the justification that the program has progressed sufficiently to permit TVA to proceed with fuel loading and that the discovery phase status is acceptable. The discovery phase includes the investigative work for a particular program and the identification, documentation and evaluation of deficiencies for impact on operability.

Since the September 13, 1988 TVA/NRC meeting, the discovery phase of the civil calculation review program has been completed. It also has been determined that the discovery phase of the cable separation program will be completed before fuel loading.

Before fuel loading, the BFNPP Volume 3 special programs will be performed to the point that the discovery phase is complete and known deficiencies have been addressed or the programs have progressed sufficiently to reasonably assure that system operability for fuel load will not be compromised.

WORK CONTROL PROCESS DESCRIPTION

Restart corrective actions and physical plant work will continue following fuel loading. As work proceeds, the operability of plant systems will be controlled in accordance with technical specifications and BFN work control processes.

To minimize impact on systems operability, physical work will be scheduled using system train outages and BFN work control and tag out procedures. The BFN work control process has recently been reorganized, similar to the work control procedures in place at the Sequoyah Nuclear Plant. This process is described in more detail in enclosure 4.

PLANS FOR INDEPENDENT REVIEW OF SYSTEM EVALUATIONS AND SPOC PACKAGES

At NRC's request, TVA is performing an independent review of the SPOC process with emphasis on the engineering evaluations and procedure implementation. The overall review is administered by Nuclear Quality Assurance and has two parts. The two parts are an independent audit and QA monitoring of the SPOC process. Two reviews constitute the independent audit, these are:

- An Engineering Assurance review of the engineering process and system evaluations, including system boundary definitions, configuration control, outstanding work on systems, and assumptions and conclusions in system safety evaluations which support system technical specification compliance.

- A Quality Assurance review of the SPOC process, including adequacy of documentation for deferred items, completed items, system status, and the supporting documentation.

The Quality Surveillance Monitoring of the SPOC process implementation, includes the adequacy of punchlists and first hand observation of Surveillance Instructions performed to support system operability.

The review will develop confidence that the SPOC process and supporting engineering evaluations demonstrate that plant systems meet the technical specification operability requirements. The results of this review will be presented to NRC onsite before fuel loading operations commence.

The independent audit team members were selected from TVA quality assurance personnel not previously associated with the SPOC process and supplemented with non-TVA personnel. Personnel selection was based on the experience of the individuals in performing similar reviews and on the past work history of the individuals. The objective was to compose a team that had no previous involvement in the development of the process or the completion of any of the SPOC or system evaluation packages. A brief synopsis of the team member backgrounds is provided in enclosure 5.

Additional details on the independent review, including identification of the systems that have been selected are also provided in enclosure 5.

TECHNICAL SPECIFICATION CHANGES AND EXEMPTIONS REQUIRED FOR FUEL LOAD

NRC requested that TVA identify any technical specification changes or exemptions that will require NRC approval before commencement of fuel loading activities. TVA had previously determined that 33 technical specification changes are required to be approved by NRC before restart. NRC has approved 19 of these restart technical specification changes. TVA has reviewed the restart technical specification changes remaining to be approved and determined that none is required to be approved before fuel loading.

TVA has also evaluated applicable regulations and rules to determine whether any exemptions would be required to support fuel loading. Two regulations, Environmental Qualification (10 CFR 50.49) and Fire Protection (10 CFR 50.48 and Appendix R) were identified that merit discussion because certain physical plant work in connection with these regulations will be completed after fuel loading. TVA has determined, for the following reasons, that exemptions from these regulations are not required for the purpose of loading fuel.

- Environmental Qualification - The requirements of 10 CFR 50.49 were established to provide regulatory assurance that electrical equipment important to safety in nuclear plants would function in the harsh environments that would exist following a design basis event. The applicable design basis events for the conditions and operations in the plant during and after fuel loading are those that are set forth in Matrix 2 of the FSAR Appendix G (reference enclosure 1). None of these events results in a harsh environment; thus, not all electrical equipment in the plant is required to be certified to meet the harsh environment requirements.

- Fire Protection - TVA has submitted its Fire Protection Plan to NRC describing upgrades to the plant and procedures to meet the requirements of 10 CFR 50.48 (reference letter dated April 4, 1988). BFN will ensure that its Fire Protection Systems are evaluated before fuel load and verified operable, or appropriate compensatory measures as specified in the BFN Fire Protection Program and technical specifications will be implemented. Thus, if an Appendix R related modification is not complete and protected equipment is required to be operable for fuel load, the compensatory measure specified in the Fire Protection Plan will be verified in place; therefore compliance is reasonably assured.

RESPONSES TO ISSUES RAISED IN NRC LETTER OF JULY 27, 1988

In its letter of July 27, 1988, NRC requested TVA address certain questions and comments. Enclosure 6 provides TVA's responses to those questions and comments.

U.S. Nuclear Regulatory Commission

OCT 21 1988

CONCLUSION

TVA has provided, in the body of this letter and the enclosures hereto, a description of its plans for ensuring that systems are declared operable for fuel loading in accordance with the technical specifications. Summary statements of commitments contained in this submittal are provided in enclosure 7.

TVA has not identified any additional exemptions from regulatory requirements or any technical specification changes that are needed for the purpose of declaring systems operable for fuel loading. This letter complies with NRC's request for a docketed description of the plans, prerequisites and technical bases for commencing fuel loading. TVA has not identified any licensing approvals needed from NRC before fuel loading other than the approval of the technical specification change identified above.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Manager
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Enclosure 1

BROWNS FERRY NUCLEAR PLANT

TECHNICAL BASIS FOR SYSTEM OPERABILITY, ENGINEERING SYSTEM EVALUATIONS, AND WORK DEFERRAL GUIDELINES

Enclosure 1

BROWNS FERRY NUCLEAR PLANT (BFN)

TECHNICAL BASIS FOR SYSTEM OPERABILITY, ENGINEERING SYSTEM EVALUATIONS, AND WORK DEFERRAL GUIDELINES

Purpose

Provide a description of the plan for System Plant Acceptance Evaluations performed by the BFN engineering project to support system return to service in accordance with the technical specifications. Also, the requirements for evaluating open work items necessary for completion before fuel load, the required justifications and guidelines for work item deferral are discussed.

Discussion

BFN has developed a process to return systems to technical specification operability. This process will be completed for each of the systems listed in enclosure 3 before fuel load. The methodology given in Appendix G of the Final Safety Analysis Report (FSAR) is used as a technical basis for determining system operability and which work items must be completed. In addition, the FSAR describes those external events that must be addressed in establishing the system design basis. An overview of this process is presented below.

The initial step is to define the system functions and support systems required to be operable to load fuel in accordance with the technical specifications. (The system requirements for fuel load are derived from the events given in Table 1 below.)

Next, the system boundary that supports the functions required (as a minimum) on primary drawings is defined. This is the projected functional configuration of the system.

System primary drawings reflecting the system and plant configuration that will be evaluated for returning a system to service in accordance with procedure BFEP-PI 88-07 are then issued. This part of the evaluation includes an evaluation of design changes (implemented, unimplemented, and partially implemented) to assess the affect of the changes on the system.

Once the configuration is established, all outstanding engineering work to be completed (this includes corrective actions from special programs) is identified and each open work item evaluated to determine its impact on system safety functions. All items required to be complete for restart are then identified on the punchlist with a subset being identified as the work necessary for fuel loading.

A safety evaluation of the system as defined by the projected functional configuration is then performed in accordance with BFEP-PI 88-07. This evaluation uses Appendix G of the FSAR as its bases considering the events listed in Table 1. Once all required engineering work is completed to support fuel load operability, a return-to-service statement is provided as input to the System Preoperability Checklist package.

Once the System Preoperability Checklist is completed through the recommendation for system operability, the system may be declared operable.

Enclosure 1

WORK DEFERRAL GUIDELINES

System Plant Acceptance Evaluations are required to assess specific restart work items or approved corrective actions for resolving restart programmatic or technical issues and list those items that are required to be complete for fuel load. Once an item is identified as required for fuel load, it may be deferred for completion after fuel load provided that a written evaluation and justification is prepared and approved in accordance with the following guidelines.

The written evaluations include as a minimum the following information and must be approved by the responsible line manager.

A. For specific deficiencies or work items that affect a fuel load system, the written justification shall address each of the following as appropriate to the subject deficiency(ies) or work item(s):

1. The system safety functions that are known to be impaired or that are potentially impaired.

2. The system safety functions required to meet technical specifications or the licensing design basis operational events and postulated accidents as set forth for Operating State A in the FSAR Appendix G (list attached).

3. A determination that the specific deficiency or work item to be deferred does not impair any of the required system safety functions or the ability of a system or component to meet its technical specification performance requirements such that a required fuel load system or component must be declared inoperable.

4. If the determination in A. 3 cannot be made affirmatively and a compensatory measure or other appropriate mitigation plan has been approved by the Plant Manager, the work item may be deferred provided that the system can meet its technical specification requirements.

5. A determination that the work item can be completed after fuel loading without causing an entire safety system required to be maintained operable to be taken out of service with no redundant safety system available and operable.

B. For generic issues and programmatic items, the written justification shall address each of the following as appropriate to the subject issue(s) or item(s):

1. If discovery is not completed, a determination must be made that the completion of discovery work and the resolution of the issue would not likely result in any of the following:

NOTE: Discovery complete means that the investigative work for a particular program is complete and the identified deficiencies have been documented and evaluated for impact on operability.

a. A modification to a fuel load system that would require the system to be removed from service.

b. a CAQ that could result in a fuel load system being declared inoperable until corrected.

c. a violation of technical specifications or a license requirement.

2. If the determination in B.1 above cannot be made, then a determination must be made that the generic issue or programmatic item addresses a condition that is outside the licensing design basis requirements for fuel loading (as set forth in Table 1) or a mitigation plan has been approved by the Plant Manager.

3. If discovery is complete, the deficiencies found within the subject program or issue scope are documented on an approved tracking system and evaluated as appropriate to make the following determinations:

a. Fuel load system safety functions are not impaired (i.e., no modification is required);

b. The item or corrective action is not needed to meet plant administration control requirements for fuel load;

c. There is no violation of a technical specification or a license requirement involved;

d. There is no specific NRC commitment or requirement to complete the item before fuel loading;

e. Changes to primary drawings or operating procedures for fuel load systems will not be required;

f. The conditions under which the item or corrective action is required to be complete are not within the scope of conditions for the operational events and accidents listed in FSAR Appendix G for Operating State A (Table 1); or

g. A compensatory measure has been approved by the Plant Manager to address any incomplete corrective actions or outstanding deficiency that impairs a fuel load system safety function.

Enclosure 1

TABLE 1

LIST OF
PLANNED OPERATIONS AND POSTULATED EVENTS DURING REFUEL

Types of Operation[1]	Postulated Events
Planned Operations[2]	Refueling Outage
Abnormal Operational Transients	
Nuclear System Pressure Increase	N/A (RPV Open)
Moderator Temperature Decrease	Shutdown Cooling (RHR) Malfunction
	Inadvertent Pump Start
Reactivity Insertion	Control Rod Withdrawal Error
	Fuel Assembly Insertion Error
	Control Rod Removal
Loss of Coolant Inventory	Inadvertent Opening of a Safety/Relief Valve
	Total Loss of Offsite Power
Core Coolant Flow Decrease	N/A
Core Coolant Flow Increase	Startup of Idle Recirculation Pump
Core Coolant Temperature Increase	Loss of Shutdown/Fuel Pool Cooling
Excess of Coolant Inventory	N/A
Accidents	Fuel Handling Accident
Special Events	Loss of Habitability of Control Room
External Events[2]	Flood/Maximum Possible Precipitation
	Tornado
	Loss of Downstream Dam
	Earthquake
	Fire

[1] Source is Matrix 2 Operating State A of Appendix G of FSAR except for External Events which are described elsewhere in the FSAR.

[2] Conditions listed in matrix 2 of FSAR Appendix G that are not applicable during refueling are:

(a) Achieving criticality because only one control rod can be moved at a time with the mode switch in REFUEL and none can be moved in SHUTDOWN.

(b) Shutdown and cooldown of the plant because the reactor will not be permitted to become critical and the reactor water temperature will be maintained below 120 degree F.

Enclosure 2

BROWNS FERRY NUCLEAR PLANT

EVALUATION OF BROWNS FERRY NUCLEAR PERFORMANCE PLAN VOLUME 3
SPECIAL PROGRAMS FOR WHICH THE
DISCOVERY PHASE IS NOT REQUIRED TO
BE COMPLETE AT FUEL LOAD

Enclosure 2

BROWNS FERRY NUCLEAR PLANT

EVALUATION OF BROWNS FERRY NUCLEAR PERFORMANCE PLAN (BFNPP) VOLUME 3
SPECIAL PROGRAMS FOR WHICH THE
DISCOVERY PHASE IS NOT REQUIRED TO
BE COMPLETE AT FUEL LOAD

TVA has evaluated the Special Programs described in Section III of the BFNPP Volume 3 and determined that, as a prerequisite to fuel loading, all special programs will be required to be complete through the discovery phase or a written justification will be prepared and approved. One program (Seismic Qualification of Large Bore Piping and Supports to NRC IE Bulletin 79-02 & 79-14 requirements) has progressed as described in the BFNPP but will not be complete through the discovery phase by fuel load.

The term "discovery complete" means that the investigative phase of the program in question is completed and the specific deficiencies have been identified and evaluated for impact on the operability of systems and the scope of corrective actions is known.

1.0 EVALUATION OF 79-02 AND 79-14 PROGRAMS

Browns Ferry Unit 2 was originally granted its operating licensing in June of 1974, based upon qualification to the applicable methodologies and criteria of that time period.

In 1979, the NRC issued two bulletins which required operating plant attention. Those were NRC IE Bulletin (IEB) 79-02 and IEB 79-14. IEB 79-02 addressed the pipe support base plate designs using concrete expansion anchor bolts; IEB 79-14 ensured that as-built safety related piping systems and supports were verified as being consistent with their qualification analysis models. These programs effectively serve to revalidate the original design, and upgrade the plant to address potential deficiencies in the design or as-built configurations.

To address IE Bulletins 79-02 and 79-14, large bore piping and support installations are walked down. The as-built piping configurations are re-evaluated and the supports re-analyzed to the resulting loads. Modifications, if required, are performed to bring the piping and support installations into compliance with the code of record.

Since this is a revalidation and upgrade effort, it has been agreed with NRC that the BFN unit 2 program can extend beyond restart.

Enclosure 2

STATUS:

TVA and NRC have met on several occasions to discuss the Browns Ferry 79-02 and 79-14 issue. The most recent meeting was held on September 8 and 9, 1988, when the engineering methodologies were finalized. In earlier sessions the programmatic issues were discussed at length. TVA continues to implement its program as presented during these meetings, with the exception of implementation schedule adjustments caused by the impact of agreements reached on September 8 and 9, 1988. A submittal incorporating the agreed changes to TVA's planned approach is being prepared.

To date, walkdowns to verify the configuration have been completed for approximately 50% of the piping and supports. Initial analyses of approximately 20% of the piping and supports are complete considering all necessary 79-02/14 review requirements. Currently, less than 6% of the supports analyzed require modification to meet the requirements defined in the BFN pipe support interim operability criteria.

Justification for Refueling

TVA's IEB 79-02 and 79-14 program is being implemented. This program has identified modifications that are required however the modification rate to date is relatively low.

Before refueling, TVA is taking the following steps. Experience gained from the initial 20% review has been used to develop a list of physical attributes. Applicable piping and support configurations are reviewed, using the list of physical attributes, within the fuel load boundary for each system required for fuel load. Where physical attributes are located they are evaluated for potential modifications considering those design conditions applicable to the system in the refueling and shutdown modes of operation. Those design conditions include dead weight and earthquake. When modifications are determined to be required for a fuel load system, they will be completed before unit 2 fuel load.

Industry experience and recent EPRI tests indicate that piping maintains its integrity during seismic events. The specific experience gained to date with TVA's program coupled with the evaluation of applicable piping within the fuel load system boundaries forms a reasonable basis to conclude that the operability of fuel load systems would not be compromised as a result of seismic event. Further, the modifications to specific hangers/supports that are scheduled to be completed before restart will be scheduled so as not to compromise the operability of entire fuel load systems.

Enclosure 3

BROWNS FERRY NUCLEAR PLANT

FUEL LOAD PREREQUISITE CHECKLIST PROCEDURE

Enclosure 3

FUEL LOAD PREREQUISITE CHECKLIST PROCEDURE

TVA is preparing a procedure (SDSP 12.9) to govern the development and completion of a Fuel Load Prerequisite Checklist to ensure that generic issues and programmatic items not covered directly by the SPOC process are reviewed and completed if necessary to support loading fuel. This procedure makes provision for the following controls and establishes the following key requirements:

1. The procedure defines the role of the Fuel Load Review Committee (FLRC) as an adhoc committee reporting to the plant manager. This committee reviews closure packages and controls the fuel load prerequisites that are listed in the Site Master Punch List (SMPL). This committee will make recommendations to the Plant Manager for the acceptance of closure documentation supporting the completion of the Fuel Load Prerequisite Checklist.

2. The procedure specifies the list of systems required to be operable to support fuel loading (fuel load systems). The procedure requires that each fuel load system have a SPOC package prepared. The list of fuel load systems is provided in table A below.

3. The procedure establishes a fuel load issues criteria for screening restart issues and programmatic items to determine which are to be listed on the fuel load prerequisite checklist. These criteria are listed in table B below. These criteria are not applicable to the system specific items that are addressed within the scope of the SPOC package and process.

4. The procedure establishes uniform definitions and requirements for the completion and documentation of corrective actions required to be completed before fuel load.

5. The procedure establishes the guidelines for deferral of work items and for documenting justifications; therefore Table C lists the deferral of work item processing guidelines.

6. The procedure defines the issues to be closed and the technical programs that must be completed through the appropriate phase (i.e., discovery complete, restart corrective actions complete or program completed and closed) at the time fuel handling activities are authorized to commence.

Enclosure 3

TABLE A

FUEL LOAD SYSTEMS REQUIRED TO HAVE COMPLETED PREOPERABILITY CHECKLISTS

NUMERICAL DESIGNATION	SYSTEM
002	CONDENSATE
003	FEEDWATER
018	FUEL OIL
023	RHR SERVICE WATER
024	RAW COOLING WATER
025	RAW SERVICE WATER
026	HIGH PRESSURE FIRE PROTECTION
030	VENTILATION SYSTEMS
031	CONTROL BAY VENTILATION
032	CONTROL AIR
039	CARBON DIOXIDE FIRE PROTECTION
052	SEISMIC MONITOR
057-1	125 VDC DISTRIBUTION
057-2	120 VAC DISTRIBUTION
057-3	250 VDC DISTRIBUTION
057-4	480 VAC DISTRIBUTION
057-5	4 KV DISTRIBUTION
057-6	48 VDC
063	STANDBY LIQUID CONTROL
064	CONTAINMENT
065	STANDBY GAS TREATMENT SYSTEM
067	EECW SYSTEM
068	REACTOR WATER RECIRCULATION
069	REACTOR WATER CLEANUP SYSTEM
070	RBCCW SYSTEM
074	RESIDUAL HEAT REMOVAL SYSTEM
075	CORE SPRAY
076	CONTAINMENT INERTING SYSTEM
078	FUEL POOL COOLING AND CLEANUP
079	FUEL HANDLING
082	DIESEL GENERATORS
085	CONTROL ROD DRIVE
086	DIESEL STARTING AIR
090	RADIATION MONITORING
092	NEUTRON MONITORING
099	REACTOR PROTECTION SYSTEM
-	METEOROLOGICAL MONITORING

Enclosure 3

TABLE B

FUEL LOAD ISSUE CRITERIA

The following criteria shall be used in evaluating whether a particular issue must be resolved before fuel load.

1. The issue identifies a deficiency which has a significant probability of leading to the inoperability of a system required during or after fuel load as determined by the appropriate technical specifications.

   NOTE: SYSTEMS REQUIRED FOR FUEL LOAD ARE LISTED ON TABLE A.

2. The item identifies a programmatic deficiency which has a high probability of causing or has caused a deficiency which meets No. 1 above.

   NOTE: In order to make this determination consider the following questions.

   - Does the item directly and adversely affect safety-related equipment?
   - Does the item adversely affect secondary containment integrity?
   - Does the item adversely affect systems used to process radioactive waste?
   - Are the programs such as Radiological Health, Security, Radiological Emergency Preparedness, or Quality Assurance which are necessary for safe conduct of operation of the plant during fuel handling or with fuel in the reactor vessel adversely affected?
   - If not corrected before fuel load, could it lead to an uncontrolled release or spread of radioactive contamination beyond the regulated area?

3. The item or issue identifies a specific deficiency that results in a failure to comply with NRC regulations which apply during fuel handling or with fuel in the reactor vessel and no variance has been approved by NRC.

   NOTE: NRC regulations means Title 10 of the Code of Federal Regulations, NRC orders issued to TVA, License Conditions, and technical specifications applicable to Browns Ferry. In order to comply with 10 CFR 50.59, any deviations (in a fuel load system) from the Safety Analysis Report (SAR) that involve an Unreviewed Safety Question (USQ) must be resolved before reloading fuel.

4. TVA has committed to NRC to complete the item before fuel load.

5. The item identifies a specific deficiency which has a significant probability of leading to a personal injury during fuel handling or with fuel in the reactor vessel.

Enclosure 3

TABLE C

RESTART WORK ITEM/ISSUE DEFERRAL GUIDELINES

GENERAL REQUIREMENTS: The following general requirements are required to be met to ensure plant readiness for fuel loading.

1. Restart work items and programmatic issues shall be evaluated for impact on fuel load system or component operability and coded to an appropriate system and milestone in the site master punchlist (SMPL) (i.e. fuel load if system or component operability is impaired).

2. Restart work items and programmatic issues that do not impact fuel load systems directly shall be evaluated to determine whether the work items must be completed to support (a) administrative requirements for maintaining or operating the plant, (b) any fuel handling activities, and (c) actions required to mitigate the consequences of any of the postulated accidents set forth in the list of planned operations and postulated accidents during refuel and open vessel testing (reference: enclosure 1 to this submittal). Work items and programmatic issues that must be completed by fuel load shall be coded to be completed prior to fuel load in SMPL.

3. Unresolved generic issues programmatic items, or generic CAQRs shall be evaluated. Those that meet the fuel load issues criteria shall be coded to FL in SMPL.

WORK ITEM DEFERRAL GUIDELINES - Specific restart work items or approved corrective actions for resolving restart programmatic or technical issues that are required by FLRC to be resolved or completed as a prerequisite for fuel loading may be deferred provided that a written evaluation and justification is provided to and accepted by the FLRC.

The written justification must include the required information and be approved by the responsible line manager. The requirements for the written justification are set forth in enclosure 1 of this submittal.

Enclosure 4

BROWNS FERRY NUCLEAR PLANT

WORK CONTROL

Enclosure 4

WORK CONTROL

One of the fundamental lessons learned during the restart of Sequoyah Unit 2 was how to effectively control work in the plant and ensure that operational and management control over the plant and work activities in the plant is maintained. To transfer the SQN experience, a work control group was put in place in the Plant Manager's organization under the Work Control/Outage Superintendent to see that plant field activities, including maintenance, construction, and testing activities that affect the plant are properly coordinated, integrated, and scheduled. An overall outage schedule is maintained on a Project-2 data base that integrates individual activities into system outage windows and major outage milestones. The Work Control group generates a monthly integrated schedule based on this Project-2 data base which is refined further in a rolling four-day look-ahead schedule that is used to authorize and schedule daily work activities.

When a new work item is identified, it is routed to Work Control where the system evaluator reviews the item for priority and initial evaluation. Work Control then assigns this activity to the implementing organization, such as Maintenance, for scoping, preplanning, and preparation of a work package. When the job has been scoped and requirements identified, the work package is returned to Work Control for scheduling. Plant design changes are governed by the configuration management procedure and are implemented by Site Modifications through a detailed workplan. Each modification is tracked on the overall outage schedule and is scheduled for work by Work Control on the four-day schedule after the engineering change notice or design change notice and workplan have been approved. If work constraints exist, such as materials, procedures, etc., they are resolved by the implementing organization and tracked by Work Control. When the activity is ready to work, Work Control processes the necessary system clearances with the operations tagging and support group and schedules the activity for work. Other support requirements, such as RADCON and Quality Control are also properly identified. The Work Control Manager conducts a schedule review meeting each day to see that any final schedule changes, including support and coordination requirements are incorporated before issuing the schedule for the next four days.

The Work Control/Outage Shift Manager uses the four-day schedule to monitor work progress and help in the coordination and resolution of problem areas. The Work Control/Outage Shift Manager conducts a shift briefing with representatives from each line and support organization at the end of each shift to address major activities on the off-going and oncoming shifts and to discuss any specific problem areas needing special attention. The Work Control/Outage Shift Manager then participates in the operations shift turnover meeting with the oncoming operations crew.

Enclosure 5

BROWNS FERRY NUCLEAR PLANT

INDEPENDENT REVIEW OF SYSTEM EVALUATIONS AND SPOC PACKAGES

Enclosure 5

INDEPENDENT REVIEW OF SYSTEM EVALUATIONS AND SPOC PACKAGES

This enclosure describes the purpose, scope, review, and team composition for TVA's independent review of the System Preoperability Checklist (SPOC) process and the documentation that supports the operability decision made by Plant Operations to support fuel load.

1.0 Purpose: To perform an in-depth review of the evaluations and supporting documentation prepared as required for returning systems to service and declaring systems operable in accordance with technical specifications.

2.0 Scope: The review will verify by independent audit and QA monitoring the adequacy of the processes required by the System Preoperability Checklist (SPOC) procedure (SDSP 12.7) and completed SPOC packages. The SPOC package will be reviewed to ensure that it supports the determinations that the systems are operable in accordance with technical specifications.

3.0 Description of Independent Review: The independent review consists of an audit and QA monitoring. There are two parts to the independent audit as described below. The audit team has divided the responsibilities for the two parts of the audit between Engineering Assurance and Quality Assurance. The following attributes/aspects of the SPOC process and the resulting documentation will be evaluated for the systems specified in paragraph 3.4.

3.1 Engineering Assurance (EA) Review of System Plant Acceptance Evaluation Process

The EA review will consist of technical review and a programmatic assessment of the system plant acceptance evaluation process. The technical review will include the following:

- A review of drawing configuration control process to ensure that the primary and critical drawings provide an accurate reflection of the functional configuration of the system.

- A review of the change document closure process (e.g., ECNs, DCNs, FDCNs, and TACFs) to ensure that all open change documents applicable to the selected system have been identified, properly evaluated, and dispositioned. Further that the 10 CFR 50.59 safety evaluations have been properly performed or updated where required (e.g, closure of a partially implemented ECNs).

- A review of the particular system plant acceptance evaluation to determine if appropriate boundaries have been determined; outstanding work items (e.g., Design Baseline Verification Program (DBVP) punchlist items, CAQs) have been evaluated, complete and appropriate system safety evaluations have been performed (including synergistic effects of modifications), and appropriate document updates have been initiated or completed as required (e.g., design criteria, FSAR and technical specifications).

The programmatic assessment will use the results of the technical review to determine if the process is adequate. This assessment will include a review of procedures for adequacy, effectiveness of their implementation and completeness of documentation supporting the system plant acceptance evaluation package.

An EA review of the diesel fuel oil and the reactor building closed cooling water systems has been completed. In conjunction with the EA review, a corrective action followup review will be performed to determine if the project has adequately resolved the concerns noted in EA's earlier review. The review of the systems listed in Section 3.2.1 will include an assessment to establish confidence that the BFN engineering project's corrective actions have been integrated into the procedure and the practices for performing subsequent system plant acceptance evaluations.

3.2 Nuclear Quality Assurance Review of the SPOC Process

The NQA review is a compliance evaluation and performance-based review of the system preoperability checklist process. The review will include the following:

- An evaluation of compliance with the SPOC process as defined by SDSP-12.7

- An evaluation of the adequacy of SDSP-12.7 in providing a systematic method to ensure that all open work items and outstanding programmatic items affecting system operability are completed or dispositioned prior to recommending that a system be declared operable.

- A review of the implementation of the SPOC process for selected systems with regard to: testing and test exceptions; temporary alteration identification, tracking and processing; maintenance scheduling and completion; identification, tracking and resolution of commitments, CAQR's, issues, etc. that affect operability; updating plant documents (e.g. operating instructions and Surveillance Instructions) as required to be consistent with the primary and critical drawings; and system configuration control.

- An evaluation of the adequacy of the operability item deferral process with respect to compliance with established acceptance criteria, completeness and documentation.

- An evaluation of the QA Monitoring program for SPOC process implementation including the results from QA inventory of system walkdown, valve line up and SI performance.

- A review of the training of appropriate plant personnel to new or revised operating instructions and surveillance instructions.

3.3 In addition to the above audit, Site Quality Assurance (QA) will perform the following reviews as part of its ongoing QA Monitoring program:

a. SPOC process implementations signoffs.
b. Fuel load checklist scope and signoffs.
c. Surveillance Instruction (SI) performance.

3.4 Systems to be reviewed.

The independent reviews and evaluations will assess five systems including the two systems which will be covered through the followup reviews (paragraph 3.4.2).

3.4.1 The following in-depth reviews will be completed before fuel load:

SYSTEMS

125V DC (System 57-1)
Reactor Water Cleanup (System 69)
Core Spray (System 75)

3.4.2 The following reviews will be performed before fuel load to verify that problems found during an earlier EA review have been corrected:

SYSTEMS

Fuel Oil (System 18)
Reactor Building Closed Cooling Water (System 70)

4.0 Independent Audit Team members-Summary of Experience

The team members and a synopsis of the education and background of each is provided below. The manager of the independent review is Mr. T. E. Burdette. The team is organized to support the structure of the review as described in paragraph 3 above, with the EA technical review team primarily responsible for review of the System Plant Acceptance Evaluation process and the NQA team responsible for review of the overall SPOC process.

Thomas E. Burdette
Manager, Nuclear Quality Audit and Evaluation
Education/Certification: B. S. Industrial Engineering, 1968

Summary of Experience

Mr. Burdette has 18 years of experience in nuclear power and the nuclear navy. His experience includes 8 years with TVA in managerial positions in Nuclear Quality Assurance; 4 years on the Clinch River Breeder Reactor Project as chief of the Quality Verification Branch and the Quality Improvement Branch; and 2 years with NRC where he was as Project Engineer in the Construction Branch responsible for construction inspections of the V. C. Summer Nuclear Plant, the St. Lucie Nuclear Plant and the Hartsville Nuclear Plant. He was also selected to be the Senior Resident Inspector at the Phipps Bend Nuclear Plant. While with the Department of Navy, he was manager of Nuclear Quality Assurance Division in the Supervisor of Ship Building Office at Pascagoula, Mississippi and was responsible for the review of the contractor's Nuclear Quality Program and compliance with contract specifications.

4.1 EA Technical Review Team

EA Review Manager - David L. Malone
Technical Audit & Surveillance Manager - TVA
Education /Certification: BS Physics, 1969; ASQC CQE

Summary of Experience

Mr. Malone has over 22 years of engineering experience in the nuclear field. He was a Lead Engineer Overhaul and Refueling Systems for Newport News Shipbuilding. He was a Lead Engineer Overhaul and Refueling and a Senior Project Engineer Shield Design and Construction Manager for Morrison-Knudsen. With Stone & Webster, he was the Audit Supervisor for Headquarters and all project audits. While in this position, he was instrumental in developing Stone & Webster's systems audit techniques (IDI, IDVP, and SSFI type) approaches to auditing. He was also assigned to Ranch Seco Nuclear Power Plant where he developed the technique for and led the first vertical slice type audit for the utility. At TVA, he has been assigned as the Technical Audit Supervisor and the Technical Audit and

Team Leader - David V. Kehoe
Principal Engineer - Stone & Webster Eng. Corp (SWEC).
Education/Certification: BSNE, 1973; Lead Auditor Certification to ANSI N45.2.23

Summary of Experience

Mr. Kehoe has fifteen years of engineering experience in the nuclear field. He has performed as a nuclear test engineer for the department of the Navy, an operations inspector for the U.S. Nuclear Regulatory Commission and has held various engineering positions with SWEC leading to his current position as principal engineer. His experience includes navy nuclear test and design, regulatory, engineering and design, construction, startup, engineering assurance, and quality assurance.

Mechanical Team Member - Erick G. Horlbeck
Senior Engineer - SWEC
Education/Certification: BSME, 1957; Registered Professional Engineer, State of New York

Summary of Experience

Mr. Horlbeck has over 30 years experience in mechanical engineering including over 14 years in the nuclear power plant field. He was assigned as principal piping engineer at the Surry and Jamesport Nuclear Power Plants and developed the American Society of Mechanical Engineering Section XI In Service Inspection (ISI) program at the Beaver Valley Nuclear Power Plant. He has participated in a construction assessment of the Braidwood Nuclear Power Plant and an evaluation of calculations at the Salem Nuclear Power Plant. He has recently been assigned as Lead Mechanical/Nuclear engineer on the Browns Ferry DBVP EA Oversight Review of the DBVP.

Instrumentation and Control (I&C) Team Member - Narinder S. Baines
Senior Engineer - SWEC
Education/Certification: BSEE, 1975; EIT, 1983, State of Wisconsin

Summary of Experience

Mr. Baines has over 12 years experience in the power engineering field including 6 years of nuclear power experience. He has held positions with Bechtel as assistant shift lead engineer, I&C Group Supervisor, Senior Startup Engineer, Senior QA Engineer, and Assistant Project Quality Engineer at the Diablo Canyon, Palisades and Zimmer Nuclear Power Plants. For Stone and Webster, he has been Senior I&C setpoint engineer on the Hope Creek Nuclear Power project and Lead I&C Engineer on the EA Oversight Review of the DBVP at Browns Ferry Nuclear Power Plant.

Enclosure 5

Operations Team Member - Gary F. Weston
Engineer - SWEC
Education/Certification: BE (Marine), 1969; Level III Test Engineer

Summary of Experience

Mr. Weston has over 19 years experience in the power engineering field with 16 years of nuclear experience. He has performed as a test engineer at the Salem Nuclear Power Plant, a Superintendent of Mechanical Quality Engineering at the Marble Hill Nuclear Power Plant. With Stone & Webster, he has been a supervisor of the construction completion group & Lead Test Engineer at Nine Mile Point Unit 2 Nuclear Power Plant and Lead Operations Engineer on the EA Oversight Review of the DBVP at Browns Ferry Nuclear Power Plant. Also, while with SWEC, he was assigned to INPO where he was a program manager in the Analysis and Engineering Division and was a certified Plant Evaluator for the Operating Experience Area.

Electrical Team Member - Jerry Semore
Lead EA Electrical Engineer - TVA
Education/Certification: BSEE, 1973

Summary of Experience

Mr. Semore has 15 years of power engineering experience of which more than 10 in the nuclear field. With TVA he has held the positions of electrical procurement engineer for power control boards, protective relaying, etc., senior electrical engineer for switchyard protective relaying and control power, lead electrical engineer for EA Oversight Review of Sequoyah Nuclear Power Plant (SQN) Units 1 and 2 and team leader for SQN Unit 1.

Operations Team Member - George T. Shell
NQA Quality Assurance Supervisor, TVA
Education/Certification: BS Industrial Technology, 1987, Senior Reactor Operator, 1975

Summary of Experience

Mr. Shell has twenty-two years of power plant experience in the nuclear field. His experience includes operations, training, maintenance, engineering, and management. He has been an assistant unit operator, reactor operator, and senior reactor operator at Browns Ferry Nuclear Power Plant (August 1971 through October 1975). He has held positions of Startup Engineer, Group Supervisor and Supervisory Engineer with Bechtel and Impel and a Section Manager, Training with INPO. Since rejoining TVA in November 1986, he has been assigned as a QA specialist and Supervisor in several capacities within QA.

Civil Team Member - Vinary K. Jain
Senior Engineer - SWEC

Education/Certification: BSME, 1958, MSME, 1962, PHDME, 1970, PE, States of Massachusettes, Virginia, and Michigan

Summary of Experience

Mr. Jain has over 20 years of engineering experience of which more than 15 years is nuclear power plant experience. With Stone & Webster, he has been assigned as Support Engineer at Beaver Valley, Millstone and Nine Mile Point Unit 2 Nuclear Power Plants and as Principal Engineer on the North Anna Unit 3 Nuclear Power Plant. He was also assigned as Principal Engineer in the headquarters Operating Nuclear Projects Group. He has recently been assigned as lead Civil/Structural Engineer on the Browns Ferry Nuclear Power Plant for EA Oversight Review of the DBVP.

4.2 Nuclear Quality Assurance Team

Team Leader - Jerry T. Barnes
Site Quality Audit Manager, BFN
Education/Certification: BSCE, 1955; Registered PE, State of Alabama, 1962

Summary of Experience

Mr. Barnes has seventeen years nuclear industry experience with TVA, including 16 years QA experience. This experience encompasses 15 years audit experience involving four TVA nuclear plants and including 13 years managing audit programs. His audit management experience includes BFN Quality Audit Manager for one year, Bellefonte QA Audit Supervisor for nine years and Construction, Maintenance and Modifications Audit Manager for one year. Other experience consists of 14 years engineering and aerospace including managing NDE research and electronics materials and processes and industrial water system design.

Team Member - John Bearden
Quality Assurance Specialist, BFN
Education/Certification: AA, Psychology, BWR-RO License E. I. Hatch, Georgia Power Co.

Summary of Experience

Mr. Bearden has ten and one half years Nuclear Power Plant Experience. His experience includes: one year at TVA as Nuclear Quality and Evaluation Department, Lead Auditor conducting audits of maintenance and operations program, Browns Ferry Nuclear; two years as System Coordination Inc., Lead Technical Writer for operating procedures at the Crystal River Nuclear Plant where he also performed job task analysis for operations personnel for INPO; two and one half years Quadrex Corporation as project manager for operation support for fire protection system at Perry Nuclear Plant; and five years licensed Reactor Operator, EI Hatch Nuclear Plant.

Team Member - R. C. Crumpler
Simulator Training Specialist
Education/Certification: Senior Reactor Operator and Reactor Operator License. Rancho Seco Senior License/Requalification Training, Farley Nuclear Plant License/Requalification Training.

Summary of Experience

Mr. Crumpler has eleven years nuclear experience of which 10 years are in operations and one year in training. Licensed Reactor Operator at Farley Nuclear Plant during transition phase of Unit II from construction to commercial operation and a Senior Reactor Operator at Rancho Seco Nuclear Plant, where as an Assistant Shift Supervisor and Shift Supervisor, he was responsible for shift operations of the plant.

Team Member - O. S. Mazzoni
Senior Consultant, NUS Corp.
Education/Certification: M.S. Electrical Engineering, 1971, B.S. Electrical/Mechanical Engineering 1961, Registered Professional Engineer in the states of New York, 1970, Washington, 1973, New Jersey, 1973, Michigan, 1973, Nebraska, 1973, Alaska, 1974, Maryland, 1984, Virginia, 1984, District of Columbia, 1984.

Summary of Experience

Mr. Mazzoni has over 27 years of electrical engineering experience in the design of nuclear and fossil generating stations. His experience includes 6 years at NUS as Manager, Electrical Engineering Department where he was responsible for the technical adequacy of all electrical and I&C engineering. Typical projects include electrical design backfit installation of high radiation sampling systems, improved design modification for solid, liquid and gaseous radwaste system, enhanced fire

protection, service water system improvements and process control automation systems. Mr. Mazzoni served 3 years in Gibbs Hill as Supervising Engineer on a major project and 10 years in Burns & Roe as supervising engineer on 4 nuclear and 3 fossil projects. Mr. Mazzoni is throughly familiar with IEEE Standards and USNRC Regulations and their interpretation and application. He is a senior member of the IEEE and has served on several committees and working groups responsible for establishing and maintaining standards. He is a member of the Senior Voting Committee that approves all IEEE standards relating to generating stations.

Team Member (part-time) - Gary J. Overbeck
Chief Mechanical Engineer - ERCI
Education/Certification: B.S., U. S. Naval Academy, 1969;
Registered PE (Nuclear), Pennsylvania and Washington

Summary of Experience

Mr. Overbeck has eighteen years of nuclear engineering experience of which the last 12 years have been in the design, construction, and operation of commercial nuclear power plants. For four years, has participated in OIE's QA Inspection Programs as a member of Integrated Design Inspections (IDI), Construction Assessment Team (CAT), Safety System Functional Inspections (SSFI), Safety System Outage Modification Inspections (SSOMI), and as a principal reviewer of Independent Design Verification Programs (IDVP). In addition, he has extensive personal expertise in all facets of commercial and naval nuclear power plants, with particular emphasis on technical aspects, nuclear project management, and reactor licensing.

Enclosure 6

BROWNS FERRY NUCLEAR PLANT

TVA RESPONSE TO NRC's JULY 27, 1988 QUESTIONS

Enclosure 6

TVA RESPONSE TO NRC QUESTIONS IN JULY 27, 1988 LETTER

In its letter of July 27, 1988, NRC requested TVA to address certain questions and comments. The following discussion provides TVA's response to NRC questions in the order presented in NRC's letter.

1. NRC requested TVA describe in a submittal the justification for its confidence that operability of the fuel load systems is not likely to be impaired by undiscovered deficiencies.

   TVA has in enclosures 1 and 2 provided the work deferral criteria, the technical basis for these criteria, and the justification for each NPP Volume 3 Special Programs that will not be complete through discovery phase before fuel load.

2. NRC requested TVA adjust its schedule for returning systems to service to provide "quiet time" for the BFN operations staff to get used to maintaining the systems in an operable status before going into the refuel mode.

   Since the time of NRC's letter, the schedule for returning systems to service has been stretched out to allow time for completion of the work required to declare the fuel load systems operable. In reality, the return to service schedule is resulting in additional time for operators to reestablish an operating plant environment and practices. Additional schedule time will be available for this purpose because of the requirement to complete the fuel load prerequisite checklist and the initial steps of the fuel loading instructions. TVA has determined that there will be sufficient "quiet time" for the operations staff.

3. NRC provided several comments on the SPOC procedure (SDSP 12.7). Where appropriate, these comments have been addressed in the revision to that procedure. TVA's response to each of NRC's comments is provided below in the same sequence as stated in NRC's Letter:

   a. NRC stated that prior to fuel load, TVA should provide to the resident inspection staff all operability deferral forms associated with BFN, Unit 2 fuel load systems. NRC also stated that if any systems do not meet technical specification requirements for operability, TVA should submit sufficient justification to NRC and allow six weeks for the necessary licensing actions to be completed.

      Arrangements have been made with the NRC residents at BFN to provide copies of SPOC deferral forms as they are completed and approved. Additionally, the NRC residents are involved in the walkdowns and valve lineups and have access to the SPOC packages as each is completed. TVA's procedures require operability of

each system to be demonstrated through the performance of Surveillance Instructions that document the technical specification performance criteria are met. Therefore, the fuel load systems will meet the technical specification process requirements.

b. NRC stated that it expects each system required for fuel load to have a completed SPOC package before the system's return to service.

The requirement that all fuel load systems have a completed SPOC packages will be set forth in the Fuel Load Prerequisite Checklist procedure, (SDSP 12.9)

c. NRC commented that SDSP 12.7, Section 6.1.1 should clearly state the minimum number of systems required to be operable by the technical specifications.

The minimum number of systems required to be operable is included in the Fuel Load Prerequisite Checklist procedure,(SDSP 12.9).

d. NRC commented that,in SDSP 12.7, Section 6.3 guidance should be given, or referenced on how to determine which items identified as required for systems operability may be deferred.

The criteria for items that are required to be completed before fuel load are given in SDSP 12.9. Also the requirements are given for written justifications used to support deferral of work items. The SPOC procedure requires that there be adequate justification for any operability items deferred. Engineering, as part of its system plant acceptance evaluation process, prepares written justifications for deferring fuel load items. The guidance provided ensures that the justifications will be consistent with the technical bases set forth in enclosure 1.

e. NRC commented that SDSP 12.7, Section 6.4.4 refers to "Special Operating Conditions" -- this term should be defined.

The following definition has been included in Section 4.0 of SDSP 12.7:

Special Operating Conditions - Any system condition resulting from the SPOC evaluation that requires operation or line-up of the system outside of the normal operating instructions for the purpose of achieving system operability for the particular milestone. These Special Operating Conditions could result from the ECN/DCN Safety Evaluation, the System Evaluation, the SYSTEM, etc.

f. NRC commented that SDSP 12.7, Section 9.0 should specify a retention period for the Operability Item Deferral form equal to that for the SPOC package itself.

Revision 1 of SDSP 12.7 specifies a minimum two year retention period. This is consistent with the retention period for the SPOC packages.

Enclosure 7

Summary of Commitments

1. TVA is preparing the Fuel Load Prerequisite Checklist Procedure (SDSP 12.9). The key elements which will be included in SDSP 12.9 are described in enclosure 3.

2. TVA is performing an independent review of the SPOC process with emphasis on the engineering evaluations and procedure implementations. The results of this review will be presented to NRC onsite before fuel loading operations commence.