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# Status of Safety Issues at Licensed Power Plants

TMI Action Plan Requirements  
Unresolved Safety Issues  
Generic Safety Issues  
Other Multiplant Action Issues

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**U.S. Nuclear Regulatory Commission**

**Office of Nuclear Reactor Regulation**



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## ABSTRACT

As part of ongoing U.S. Nuclear Regulatory Commission (NRC) efforts to ensure the quality and accountability of safety issue information, the NRC established a program for publishing an annual report on the status of licensee implementation and NRC verification of safety issues in major NRC requirements areas. This information was initially compiled and reported in three NUREG-series volumes. Volume 1, published in March 1991, addressed the status of Three Mile Island (TMI) Action Plan Requirements. Volume 2, published in May 1991, addressed the status of unresolved safety issues (USIs). Volume 3, published in June 1991, addressed the implementation and verification status of generic safety issues (GSIs). The first annual supplement, which combined these volumes into a single report and presented updated information as of September 30, 1991, was published in December 1991. The second annual supplement, which provided updated information as of September 30, 1992, was published in December 1992. Supplement 2 also provided the status of licensee implementation and NRC verification of other multiplant action (MPA) issues not related to TMI Action Plan requirements, USIs, or GSIs. This third annual NUREG report, Supplement 3, presents updated information as of September 30, 1993.

The data contained in this supplement is produced using the NRC's safety issues management system (SIMS) database, which is maintained by the project management staff in the Office of Nuclear Reactor Regulation and by the staff in NRC's regions.

This report gives a comprehensive description of the implementation and verification status of TMI Action Plan requirements, safety issues designated as USIs, GSIs, and other MPAs that have been resolved and involve implementation of an action or actions by licensees. This report makes the information available to other interested parties, including the public. Additionally, this report serves as a follow-on to NUREG-0933, "A Prioritization of Generic Safety Issues," which tracks safety issues until requirements are approved for imposition at licensed plants or until the NRC issues a request for action by licensees.

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## EXECUTIVE SUMMARY

This U.S. Nuclear Regulatory Commission (NRC) report covers the implementation and verification status of the Three Mile Island (TMI) Action Plan requirements, unresolved safety issues (USIs), generic safety issues (GSIs), and other multiplant action (MPA) issues not related to TMI Action Plan requirements, USIs, or GSIs at 109 licensed nuclear power plants. The implementation and verification status are current as of September 30, 1993.

### Background

The implementation and verification status of TMI Action Plan requirements, USIs, and GSIs was initially reported in Volumes 1, 2, and 3 of NUREG-1435, published in 1991. The first annual supplement consolidated and updated the information given in the earlier three volumes; it was published in December 1991 and provided updated information as of September 30, 1991. The second supplement was published in December 1992 and gave updated information as of September 30, 1992. Supplement 2 also gave the status of licensee implementation and NRC verification of other multiplant action (MPA) issues not related to TMI Action Plan requirements, USIs, or GSIs. This third annual report, Supplement 3, gives updated information as of September 30, 1993. The data contained herein is a product of the NRC's Safety Issues Management System (SIMS), which is maintained by the project management staff in the Office of Nuclear Reactor Regulation and by the staff in NRC's regions. The NRC has given significant attention to the quality review of TMI, USI, GSI, and other MPA implementation and verification data in SIMS.

Supplement 2 reported data on 110 plants. It included San Onofre 1 and Trojan, which are now permanently shut down. It did not include data for Comanche Peak 2, which is now fully operational. Supplement 3 reports data for 109 plants, including data for Comanche Peak 2, but excluding data for San Onofre 1 and Trojan.

### Three Mile Island Action Plan Requirements

Implementation Status. More than 99 percent of the TMI Action Plan items have been implemented at 109 licensed plants. Of the 12,898 applicable items, 12,837 have been completed or closed and only 61 remain open from an implementation standpoint.

About 38 percent of the remaining 61 open items are projected to be implemented by the end of calendar year 1994. As noted in previous supplements, some slippages have occurred in projected implementation dates. Delays in the restart of Browns Ferry Units 1 and 3 account for 34 of the 61 unimplemented items. All schedules for implementation of TMI Action Plan items with the exception of Browns Ferry 1, remain within the timeframe previously reported to the Commission and to Congress.

From an issue perspective, four major areas account for about 77 percent of the 61 remaining items: detailed control room design review items (21), accident monitoring (10), plant safety parameter display system items (8), and B&O Task Force Issues (8).

From a plant perspective, the TMI Action Plan requirements have been fully implemented or closed at 82 of the 109 licensed plants. Two plants, Browns Ferry Units 1 and 3, account for approximately 56 percent, or 34 of the 61 remaining items. Of the remaining 25 plants, each has 1 remaining item to implement, with the exception of Browns Ferry 2 and Haddam Neck, which have 2 each.

Verification Status. TIs have been issued for 78 individual TMI requirements to provide guidance for the field verification of licensee implementation. Of the 5,992 TMI items requiring verification, 5,939 (99 percent) have been completed.

#### Unresolved Safety Issues (USIs)

Implementation Status. Approximately 90 percent of the USI items have been implemented at licensed plants. Of the 1,787 applicable items, 1,610 have been completed and 177 remain open from an implementation standpoint. On average, each plant has approximately 2 remaining items to implement, and no plant has more than 6 items to implement.

Three USIs (A-44, Station Blackout; A-46, Seismic Qualification of Equipment in Operating Plants; and A-47, Safety Implications of Control Systems) account for 90 percent of the unimplemented items. These three USIs are in varying stages of NRC review and licensee implementation, as further described in Section 3.1 of this report.

Verification Status. Five TIs have been issued to provide guidance for the field verification of licensee implementation. These TI designations correspond to USIs A-7, Mark I Long-Term Program; A-9, Anticipated Transients Without Scram; A-24, Qualification of Class 1E Safety-Related Equipment; A-26, Reactor Vessel Pressure Transient Protection; and A-44, Station Blackout.

The requirements to perform field verifications have resulted in a total of 423 items to be verified at the 109 plants. As of September 30, 1993, the NRC field verification had been completed on 292 (69 percent) of the required items.



## Generic Safety Issues (GSIs)

Implementation Status. Approximately 94 percent of the applicable items associated with GSIs have been implemented at licensed plants. Of the 2,621 applicable items, 2,463 have been completed and 158 remain open from an implementation standpoint. On average, each plant has fewer than 2 items to implement, and no plant has more than 7 items to implement. Thirty-nine plants have implemented all applicable items related to GSIs. Five GSIs account for 90 percent of the items for which implementation is incomplete. These GSIs are specifically addressed in Section 4.1 of this report.

Verification Status. Eight TIs have been issued to provide guidance for the field verification of licensee implementation. Of the 1,176 GSI items requiring verification, 1,045 (89 percent) have been completed.

## Other Multiplant Actions (MPAs)

Implementation Status. Approximately 87 percent of the applicable items associated with MPAs have been implemented at licensed plants. Of the 7,517 applicable items, 6,576 have been completed and 941 remain open from an implementation standpoint. On average, each plant has approximately 9 remaining items to implement, and no plant has more than 12 items to implement except Browns Ferry Units 1 and 3. Each of these units has 20 items. No plant has implemented all applicable items related to other MPAs. Eleven MPAs account for 85 percent of the items for which implementation is incomplete. These 11 MPAs as well as those with more than 3 open items are specifically addressed in Section 5.1 of this report.

Verification Status. Fifteen TIs have been issued to provide guidance for the field verification of licensee implementation. Of the 776 MPA items requiring verification, 589 (76 percent) have been completed.

## Conclusions

After a detailed review of the implementation and verification status of TMI Action Plan requirements, USIs, GSIs, and other MPAs, the NRC staff has drawn the following conclusions:

- The NRC closure process for TMI Action Plan issues, USIs, GSIs, and other MPAs is adequate for protecting the public health and safety.
- Licensees continue to make progress in implementing actions that are voluntary or that are imposed or requested by the staff. The framework exists to verify that open items are implemented in the future.
- The NRC continues to make progress in verifying the implementation actions that licensees reported complete.

- **The schedule slippages related to implementing TMI Action Plan items do not pose a threat to the public health and safety. The NRC staff will continue to maintain close oversight of the implementation actions and schedules proposed by the licensees to ensure that remaining TMI requirements are completed in accordance with regulatory requirements and within acceptable time frames.**

## ABBREVIATIONS

ACRS	Advisory Committee on Reactor Safeguards
ATWS	anticipated transient without scram
BL	bulletin
B&O	bulletins and orders
B&W	Babcock and Wilcox
BWR	boiling-water reactor
BWROG	Boiling Water Reactors Owners Group
CE	Combustion Engineering
CPI	containment performance improvement
CRGR	Committee for the Review of Generic requirements
DBA	design-basis accident
ECCS	emergency core cooling system
GIP	generic implementation procedure
GL	generic letter
GSER	generic safety evaluation report
GSI	generic safety issue
HPCI	high-pressure coolant injection
IGSCC	intergranular stress corrosion cracking
IN	information notice (NRC)
IPE	individual plant examination
IPEEE	individual plant examination of external events
IST	inservice testing
LCO	limiting conditions for operation
MOV	motor-operated valve
MPA	multiplant action
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation (NRC)
NUMARC	Nuclear Management and Resource Council
ODCM	Offsite Dose Calculation Manual
PCP	process control program
PORV	power-operated relief valves
PWR	pressurized-water reactor
PZR	pressurizer
RCIC	reactor core isolation cooling
RCS	reactor coolant system
RES	Office of Nuclear Regulatory Research (NRC)
RETS	radioactive effluent technical specifications
RG	regulatory guide
RHR	residual heat removal
RWCU	reactor water cleanup
SBL	supplement bulletin
SIMS	safety issues management system

<b>SOER</b>	<b>significant operating experience report</b>
<b>SPDS</b>	<b>safety parameter display system</b>
<b>SQUG</b>	<b>Seismic Qualification Utility Group</b>
<b>SRM</b>	<b>staff requirements memorandum</b>
<b>SSER</b>	<b>supplementary safety evaluation report</b>
<b>TI</b>	<b>temporary instruction</b>
<b>TMI</b>	<b>Three Mile Island</b>
<b>TS</b>	<b>technical specifications</b>
<b>TU</b>	<b>Texas Utilities (Electric)</b>
<b>USI</b>	<b>unresolved safety issue</b>
<b>VIB</b>	<b>vital instrument bus</b>

## 1 INTRODUCTION

This third annual report, Supplement 3, updates the implementation and verification status of the Three Mile Island (TMI) Action Plan requirements, unresolved safety issues (USIs), generic safety issues (GSIs), and other multiplant actions (MPAs). The NRC previously published three volumes of this NUREG series. Volume 1, published in March 1991, discussed the status of TMI Action Plan requirements. Volume 2, published in May 1991, identified the implementation and verification status of actions associated with USIs. Volume 3, published in June 1991, detailed the status of GSI actions. The first annual NUREG report, Supplement 1, combined these volumes into a single report and provided updated information as of September 30, 1991. Supplement 1 was published in December 1991. The second annual NUREG report, Supplement 2, provided updated information as of September 30, 1992. In addition, Supplement 2 also provided the status of licensee implementation and NRC verification of MPA issues not related to TMI Action Plan requirements, USIs, or GSIs. This third annual NUREG report, Supplement 3, provides updated information as of September 30, 1993 for all TMI, USI, GSI, and MPA issues. Subsequent volumes will continue to be published annually to document the progress of implementation and verification of these items.

This report describes the implementation and verification status at the 109 licensed plants in the United States and makes this information available to interested parties, including the public. Supplement 2 of this NUREG series reported data on 110 plants, including San Onofre 1 and Trojan which are now permanently shut down but not including Comanche Peak 2, which is now fully operational. For the purpose of this report, San Onofre 1 and Trojan have been excluded from the data and Comanche Peak 2 has been included in the data on the implementation and verification status of TMI Action Plan requirements as well as USIs, GSIs and other MPAs.

Included herein is information on the implementation and verification status of the TMI Action Plan requirements, USIs, GSIs, and other MPAs. For the 109 licensed plants, there are 12,898 applicable items for TMI Action Plan issues, 1,787 for USIs, 2,621 for GSIs, and 7,517 for other MPAs. A total of 24,823 applicable items are addressed in this report. The information presented in this volume is current as of September 30, 1993.

### 1.1 Background

TMI Action Plan requirements, USIs, GSIs, and other MPAs are all types of generic issues that originated from increased technical understanding of the safety of nuclear power plants. This increase in understanding occurred over time and resulted from operating events, research, testing, and experience. The specific origins of these issues and the development of requirements in each area, with the exception of other MPA's, were discussed in Volumes 1 through 3 of this NUREG series. The origin for other MPAs is discussed in section 1.3 of this supplement. Actions to be taken by licensees in response to these generic issues apply to more than one plant.

The NRC evaluates the status of each licensee's implementation in conjunction with its evaluation of other NRC requirements, unique plant considerations, and interim measures. Similarly, the NRC authorizes a licensee to restart or begin operation of its plant only after carefully reviewing the plant's compliance with NRC requirements and evaluating the licensee's demonstrated capabilities to safely operate the plant. The NRC has allowed operation of a new plant, or continued operation of a licensed plant, when the licensee has not fully implemented all items discussed in this report only after ensuring that sufficient compensatory measures have been taken or after determining that plant operation presented no undue risk to the public health and safety.

The data contained in this NUREG report are a product of the NRC's Safety Issues Management System (SIMS), which is maintained by the Project Management Staff in the Office of Nuclear Reactor Regulation (NRR) and by NRC regional personnel. The NRC has given significant attention to the quality review of TMI, USI, GSI, and other MPA implementation and verification data in SIMS.

## 1.2 Process and Accountability

In 1989, the Commission adopted a six-step program for closure of generic safety issues. Although TMI requirements were treated separately, the process to achieve and verify closure of these issues is similar to that used for USIs, GSIs and MPAs. The overall NRC program consists of the following steps:

- Identifying Relevant Issues – Generic concerns are typically identified by the NRC staff as a result of perceived problems at one or more operating nuclear power plants, or as a result of revised analyses pertaining to matters previously considered resolved. Issues may also be identified by others, for example, licensees, vendors, the Advisory Committee on Reactor Safeguards (ACRS), and the public. The NRC staff identified the TMI requirements by compiling and evaluating information from all available sources concerning the accident at TMI.
- Prioritizing Issues – Once identified, an issue is evaluated by the staff for its potential importance to nuclear safety. The staff classifies the issue and establishes a priority for resolution based on this evaluation and on other factors, such as value-impact analysis and risk assessment. The primary purpose of prioritizing issues is to assist in the timely and efficient allocation of resources to those safety issues that have a high potential for reducing risk. Four priority categories are used: high, medium, low, and drop. A high priority ranking means that a concentrated effort is appropriate to achieve the earliest resolution practical.
- Resolving Issues – The staff evaluates corrective actions that might be taken to satisfactorily resolve a safety issue. In addition to using experience, tests, and experiments, the staff may use the results of analyses, probabilistic risk assessments, or other calculations in this evaluation. The staff uses the results of such work to propose the action or actions it would consider an acceptable basis

for closing the issue. The evaluation may require NRC to change requirements or guidance.

- **Imposing Requirements (USIs and TMI Action Plan Requirements)** – Each affected licensee or applicant is required to prepare a schedule for implementing the resolution consistent with a rule, policy statement, regulatory guide, generic letter, bulletin, or licensing guidance developed during the resolution stage. The NRC staff evaluates the importance of the issue and determines whether it is to be imposed only on plants licensed after resolution of the issue, or if the required corrective actions should be backfit to existing plants.
- **Requesting Action (GSIs)** – The NRC staff evaluates the importance of an issue and determines the types or classes of plants to which the resolution applies. The staff also determines whether corrective action is appropriate for existing plants or only for plants licensed after resolution of the issue. These corrective actions may be imposed on licensees in the form of a rule, policy statement, regulatory guide, generic letter, bulletin, or licensing guidance. Each affected licensee or applicant is required to prepare a schedule for implementing the resolution. Once an issue is resolved, each action to be implemented is assigned a multiplant action (MPA) number for tracking purposes.
- **Implementing Actions** – Licensees of affected plants take corrective actions to satisfy commitments made in response to the imposed requirements (TMI Action Plan requirements and USIs) or the staff's request (GSIs and other MPA issues). These actions may include modifications or additions to equipment, structures, procedures, technical specifications, operating instructions, and so forth.

The role of the NRC Project Manager in implementing the resolution of a particular issue depends on the safety significance of the issue and the manner in which the issue is to be addressed. Significant TMI Action Plan requirements or USIs may require backfits to existing plants. Backfitting is imposed by rule or order unless the licensee volunteers to comply, in which case a confirmatory order may be issued. In any case, a deadline is set or negotiated for completing action at the particular nuclear plant. The Project Manager monitors licensee progress toward closure and ensures that the work is completed by the negotiated date. The Project Manager ensures that the status of the item is properly documented for each plant.

- **Verifying Implementation** – NRR staff members, NRC regional personnel and NRC resident inspectors ensure that licensees meet commitments made to the NRC for those issues requiring verification. Temporary instructions (TIs) have been issued to guide inspectors in verifying licensee implementation of corrective actions for certain generic issues that require plant hardware changes and subsequent verification by the NRC. Other issues may require engineering analysis to demonstrate continued safety of the plant, but require no specific plant configuration changes. For these issues, the NRC headquarters staff reviews and

ensures the acceptability of each analysis, and no verification at the plant site is required.

SIMS is designed to track issues from their identification through implementation of associated actions and field verification. The NRR Project Manager periodically obtains data pertaining to the licensee's implementation dates from meetings, site visits, and discussions with resident inspectors or the licensee. Recent NRC initiatives to improve the quality and the accountability of data include requirements that (1) any conclusion that a corrective action has been implemented be accompanied by a reference document from the licensee staff providing the basis for closure of the issue at the particular plant, and (2) the inspection report number and the date of the inspection be entered into SIMS if verification is required.

### 1.3 Definitions

A number of terms are used to describe generic issues and their status. These terms are important not only because they categorize issues and their origin, but because their use implies both applicability and degree of completeness. For the purposes of this report, the following definitions apply:

- Generic Safety Issue (GSI) – A safety concern that affects the design, construction, or operation of all, several, or a class of nuclear power plants and may have the potential for safety improvements at such plants.
- Implemented Item – An item is implemented when a licensee has completed the activities necessary to satisfy the requirements (or assumptions) made in the staff's technical resolution in accordance with commitments concerning the generic issue.
- Item – The application of a TMI Action Plan requirement, USI, GSI or other MPA issue to a specific plant.
- MPA - A multiplant action item originates from industry experience, new regulations/requirements, or from resolution of generic issues resulting in the issuance of a generic communication requiring action by the licensees. TMI items, USIs and GSIs are all MPAs; however, there are also other MPAs that do not fit into one of these categories. These other MPAs may be either required or voluntary.
- TMI Action Plan Item – An issue applicable to one or more licensed plants as derived from NUREG-0737, Supplement 1, thereto.
- Total Plant Items – The theoretical maximum number of potential items resulting from applying each issue (TMI, USI, GSI or other MPA) to all 109 plants.
- Total Applicable Plant Items – The total number of applicable items determined by reviewing the applicability of each issue at each of the 109 licensed plants.



- **Unimplemented Item** – An item is unimplemented when a plant has not completed the activities necessary to satisfy the actions requested or required by the staff following the resolution of a particular generic issue.
- **Unresolved Safety Issue (USI)** – A matter affecting a number of nuclear power plants that poses important questions concerning the adequacy of existing safety requirements for which a final resolution has not yet been developed and that involves conditions not likely to be acceptable over the lifetime of the plants affected as identified in NUREG-0510 and subsequent annual reports to Congress.
- **Verification Completed** – A licensee's actions to implement a technical resolution for a generic issue have been inspected and verified by the NRC in accordance with the guidance provided by the applicable temporary instruction for that issue.

## 2 THREE MILE ISLAND ACTION PLAN REQUIREMENTS

This section describes the overall status of implementation and verification of TMI Action Plan items at the 109 currently licensed plants. Supplement 2 of this NUREG series reported data on TMI Action Plan requirements for 110 plants, including San Onofre 1 and Trojan which are now permanently shut down but not including Comanche Peak 2, which is now fully operational. For the purpose of this report, San Onofre 1 and Trojan have been excluded from the data and Comanche Peak 2 has been included in the data on the implementation and verification status of TMI Action Plan requirements.

### 2.1 Implementation Status

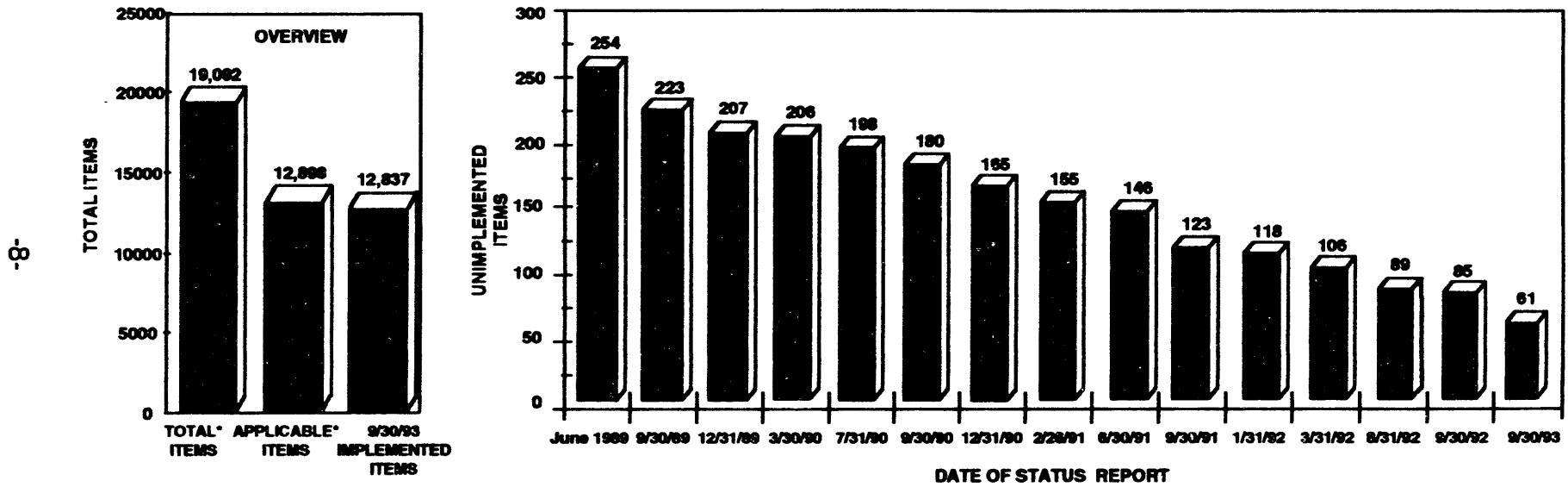
More than 99 percent of the TMI Action Plan items have been implemented or closed at licensed plants. Of the 12,898 items, 12,837 have been completed and only 61 have not yet been implemented. Figure 2.1 presents the overall status of implementing the TMI Action Plan requirements. The 12,837 items completed at the 109 licensed plants have been disposed of as follows:

- A total of 12,441 have been implemented or closed by either incorporating fixes into the plant design before licensing or by implementing the necessary requirements at operating plants.
- A total of 396 items have been superseded and the associated requirements have been effectively addressed by other items or through other regulatory means. The superseded items are discussed in detail in Volume 1 of NUREG-1435.

The following observations are made about the remaining 61 unimplemented items:

- Approximately 38 percent of these items are projected to be implemented by the end of calendar year 1994, as shown in Figure 2.2. Licensees continue to make progress toward implementation of the remaining items.
- As noted in previous status reports, some slippages have occurred in projected implementation dates. Delays in the restart of Browns Ferry Units 1 and 3 (34 items), along with the rescheduling of refueling outages at other plants account for a large number of the slippages in the implementation of remaining TMI items. Browns Ferry Unit 1 has 15 TMI items that will not be implemented until 1997. All schedules for implementing the remaining TMI Action Plan items are within the timeframe previously reported to the Commission and to Congress.
- From an issue perspective, four major areas account for about 77 percent of the 61 unimplemented items, as shown in Table 2.1: detailed control room design review items (21), accident monitoring (10), safety parameter display system items (8), and B&O Task Force Issues (8).

## TMI ACTION PLAN REQUIREMENTS IMPLEMENTATION STATUS AT LICENSED PLANTS

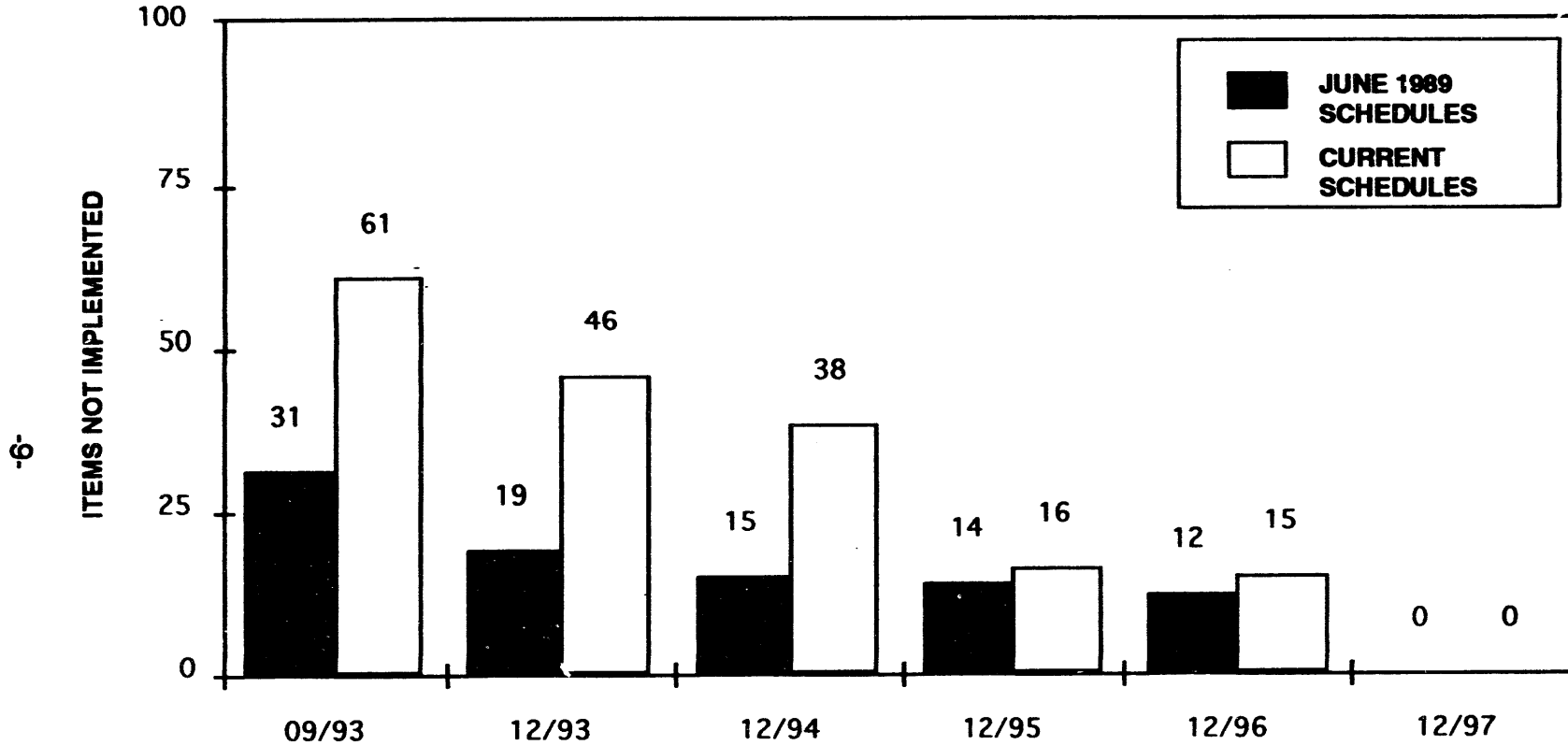


\*These totals do not include items for Ft. St. Vrain, Rancho Seco, San Onofre 1, Shoreham, Trojan and Yankee Rowe plants. These plants are permanently or indefinitely shut down. The total number of licensed plants considered in this report is 109.

Figure 2.1

# PROJECTED SCHEDULES FOR REMAINING TMI ITEMS

## ITEMS NOT IMPLEMENTED AT END OF CALENDAR YEAR



	09/93	12/93	12/94	12/95	12/96	12/97
<b>JUNE 1989 SCHEDULES*</b>	31	19	15	14	12	0
<b>09/30/93 SCHEDULES*</b>	61	46	38	16	15	0

\*Based on dates of items listed as not implemented

Figure 2.2

## SUMMARY OF THE REMAINING TMI ITEMS BY AREA

<u>AREA</u>	<u>OPEN</u>
o Plant SPDS Console	8
o Post-Accident Sampling	5
o Relief & Safety Valve Test Report	1
o Containment Isolation Dependability	3
o Accident Monitoring	10
o Instrumentation for Detection of Inadequate Core Cooling	4
o B&O Task Force Issues	8
o Control Room Habitability	1
o Detailed Control Room Design Review	21
<b>TOTAL</b>	<b>61</b>

Table 2.1

- From a plant perspective, the TMI Action Plan has been fully implemented or closed at 82 of the 109 licensed plants. Table 2.2 summarizes the 61 unimplemented items by plant. Two plants account for approximately 56 percent of the remaining 61 items: Browns Ferry 1 and 3 (34 items). Browns Ferry 2 and Haddam Neck have 2 items and the remaining plants have 1 item each to implement.

Appendix A lists the unimplemented TMI items by issue and gives projected implementation dates.

## 2.2 Verification Status

For generic items, such as the TMI requirements, the Office of Nuclear Reactor Regulation issues temporary instructions (TIs), when appropriate, to specify which requirements are to be verified by the NRC after licensees have implemented the corrective actions specified in the resolution. The NRC performs these inspections, consistent with other inspection priorities, to verify proper implementation of the requirements. Verification is not considered complete until the NRC conducts the required inspection in accordance with the TI, and issues an inspection report documenting that the licensee has adequately satisfied the requirements. On occasion, there may be issues for which the verification requirements according to the TI are completed before the licensee has fully implemented all aspects of the issue.

TIs have been issued for 78 individual TMI requirements, which cover a total of 6487 items at the 109 licensed plants. Upon initial inspection of certain items and further review by the regional offices, 495 items covered by the TIs were found to be inapplicable from a verification standpoint, leaving a net total of 5992 items requiring verification. The majority of items found not applicable are cases in which initial inspections did not reveal any significant findings and for which further inspection effort cannot be justified.

As of September 30, 1993, 5939 items (99 percent) had been verified. Only 53 items remain to be verified, including some items not yet implemented by licensees.

**SUMMARY OF THE REMAINING TMI ITEMS BY PLANT**

<b>PLANT</b>	<b>OPEN</b>	<b>PLANT</b>	<b>OPEN</b>	<b>PLANT</b>	<b>OPEN</b>
Big Rock Point	1	Millstone 1	1	Prairie Island 1	1
Browns Ferry 1	15	Nine Mile Pt 1	1	Prairie Island 2	1
Browns Ferry 2	2	North Anna 1	1	Quad Cities 2	1
Browns Ferry 3	19	North Anna 2	1	San Onofre 2	1
Diablo Canyon 1	1	Palo Verde 1	1	San Onofre 3	1
Diablo Canyon 2	1	Palo Verde 3	1	Sequoyah 1	1
Dresden 3	1	Pilgrim 1	1	Sequoyah 2	1
Ft Calhoun	1	Point Beach 1	1	Surry 1	1
Haddam Neck	2	Point Beach 2	1	Surry 2	1

**Table 2.2**

### **2.3 Status by Plant**

Table 2.3 presents summary information on the status of TMI Action Plan items (except superseded items) at all licensed plants. For implementation, the table shows the number of applicable items, the number of items completed, the percentage completed, and the number of items remaining. For verification, the table shows the number of items covered by TIs at each plant, the number requiring verification, the number completed, and the percentage completed. Appendix A lists the unimplemented items by issue and gives projected implementation dates.

From an implementation standpoint, the TMI Action Plan has been fully implemented at 82 of the 109 licensed plants. Browns Ferry Units 1 and 3 (34 items) account for approximately 56 percent of the 61 remaining open items.

From a verification standpoint, all required inspections have been completed at 78 of the 109 licensed plants. Browns Ferry Units 1 and 3 have 10 items each that will require verification following implementation by the licensee. Twenty-nine plants have 2 or less items remaining to be verified.



SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF TMI ACTION PLAN - SUMMARY BY PLANT

UNIT	IMPLEMENTATION				VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS REMAINING	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
ARKANSAS 1	122	122	(100)	0	62	61	61	(100)
ARKANSAS 2	112	112	(100)	0	59	58	58	(100)
BEAVER VALLEY 1	117	117	(100)	0	62	61	61	(100)
BEAVER VALLEY 2	126	126	(100)	0	62	57	57	(100)
BIG ROCK POINT 1	104	103	(99)	1	56	50	50	(100)
BRAIDWOOD 1	126	126	(100)	0	62	56	56	(100)
BRAIDWOOD 2	126	126	(100)	0	62	56	56	(100)
BROWNS FERRY 1	110	95	(86)	15	57	51	41	(80)
BROWNS FERRY 2	110	108	(98)	2	57	51	50	(98)
BROWNS FERRY 3	110	91	(82)	19	57	51	41	(80)
BRUNSWICK 1	110	110	(100)	0	57	51	51	(100)
BRUNSWICK 2	110	110	(100)	0	57	51	51	(100)
BYRON 1	126	126	(100)	0	62	58	58	(100)
BYRON 2	126	126	(100)	0	62	58	58	(100)
CALLAWAY 1	123	123	(100)	0	60	60	60	(100)
CALVERT CLIFFS 1	113	113	(100)	0	59	53	53	(100)
CALVERT CLIFFS 2	113	113	(100)	0	59	53	53	(100)
CATAWBA 1	126	126	(100)	0	62	60	59	(98)
CATAWBA 2	126	126	(100)	0	62	62	61	(98)
CLINTON 1	120	120	(100)	0	56	56	56	(100)
COMANCHE PEAK 1	119	119	(100)	0	55	50	50	(100)
COMANCHE PEAK 2	120	120	(100)	0	59	53	53	(100)
COOK 1	117	117	(100)	0	62	55	55	(100)
COOK 2	117	117	(100)	0	62	55	55	(100)
COOPER STATION	110	110	(100)	0	57	51	51	(100)
CRYSTAL RIVER 3	122	122	(100)	0	62	56	54	(96)
DAVIS-BESSE 1	121	121	(100)	0	61	55	55	(100)
DIABLO CANYON 1	126	125	(99)	1	61	55	55	(100)
DIABLO CANYON 2	126	125	(99)	1	61	57	57	(100)
DRESDEN 2	110	110	(100)	0	58	52	51	(98)
DRESDEN 3	110	109	(99)	1	58	52	51	(98)
DUANE ARNOLD	110	110	(100)	0	57	54	54	(100)
FARLEY 1	118	118	(100)	0	62	56	56	(100)
FARLEY 2	128	128	(100)	0	62	56	56	(100)
FERMI 2	120	120	(100)	0	56	50	50	(100)
FITZPATRICK	110	110	(100)	0	57	56	55	(98)
FORT CALHOUN 1	113	112	(99)	1	59	55	54	(98)
GINNA	116	116	(100)	0	61	56	56	(100)
GRAND GULF 1	120	120	(100)	0	56	50	50	(100)
HADDAM NECK	117	115	(98)	2	62	55	54	(98)
HARRIS 1	125	125	(100)	0	61	60	60	(100)
HATCH 1	110	110	(100)	0	57	57	57	(100)
HATCH 2	110	110	(100)	0	57	57	56	(98)
HOPE CREEK 1	120	120	(100)	0	56	50	50	(100)

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Table 2.3

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF TMI ACTION PLAN - SUMMARY BY PLANT

UNIT	IMPLEMENTATION			VERIFICATION		
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS COVERED	ITEMS REQUIRED	PER CENT COMPLETED
INDIAN POINT 2	118	118	(100)	62	59	(100)
INDIAN POINT 3	117	117	(100)	62	59	(100)
KEMAUNE	117	117	(100)	62	58	(98)
LASALLE 1	120	120	(100)	56	52	(100)
LASALLE 2	120	120	(100)	56	52	(100)
LIMERICK 1	120	120	(100)	56	52	(100)
LIMERICK 2	120	120	(100)	56	52	(100)
MAINE YANKEE	113	113	(100)	59	50	(100)
MCGUIRE 1	127	127	(100)	62	61	(98)
MCGUIRE 2	127	127	(100)	62	61	(98)
MILLSTONE 1	109	109	(99)	56	46	(97)
MILLSTONE 2	113	113	(100)	59	54	(100)
MILLSTONE 3	127	127	(100)	62	58	(100)
MONTICELLO	110	110	(100)	57	51	(100)
NINE MILE POINT 1	107	106	(99)	56	54	(100)
NINE MILE POINT 2	119	119	(100)	55	52	(100)
NORTH ANNA 1	118	117	(99)	62	60	(100)
NORTH ANNA 2	128	127	(99)	62	60	(100)
OCONEE 1	122	122	(100)	62	57	(98)
OCONEE 2	122	122	(100)	62	58	(98)
OCONEE 3	122	122	(100)	62	57	(98)
OYSTER CREEK 1	107	107	(100)	56	47	(100)
PALISADES	113	113	(100)	59	51	(100)
PALO VERDE 1	120	119	(99)	59	52	(100)
PALO VERDE 2	120	120	(100)	59	53	(100)
PALO VERDE 3	120	119	(99)	59	54	(100)
PEACH BOTTOM 2	110	110	(100)	57	51	(100)
PEACH BOTTOM 3	110	110	(100)	57	51	(100)
PERRY 1	120	120	(100)	56	48	(100)
PILGRIM 1	110	109	(99)	57	48	(100)
POINT BEACH 1	117	116	(99)	62	56	(100)
POINT BEACH 2	117	116	(99)	62	56	(100)
PRAIRIE ISLAND 1	117	116	(99)	62	52	(100)
PRAIRIE ISLAND 2	117	116	(99)	62	53	(100)
QUAD CITIES 1	110	110	(100)	57	50	(98)
QUAD CITIES 2	110	109	(99)	57	50	(98)
RIVER BEND 1	119	119	(100)	56	50	(100)
ROBINSON 1	117	117	(100)	62	54	(96)
ROBINSON 2	116	116	(100)	61	54	(96)
SALEM 1	127	127	(100)	62	57	(96)
SALEM 2	127	127	(100)	62	57	(96)
SAN ONOFRE 2	122	121	(99)	59	53	(100)
SAN ONOFRE 3	122	121	(99)	59	55	(100)
SEABROOK 1	127	127	(100)	62	57	(100)
SEQUOYAH 1	127	126	(99)	62	55	(98)

Table 2.3

**SAFETY ISSUE MANAGEMENT SYSTEM**

**STATUS OF TMI ACTION PLAN - SUMMARY BY PLANT**

UNIT	IMPLEMENTATION				VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS REMAINING	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
SEQUOYAH 2	127	126	(99 )	1	62	58	58	(100)
SOUTH TEXAS 1	126	126	(100)	0	62	56	56	(100)
SOUTH TEXAS 2	126	126	(100)	0	62	56	56	(100)
ST LUCIE 1	113	113	(100)	0	59	55	55	(100)
ST LUCIE 2	122	122	(100)	0	59	54	54	(100)
SUMMER 1	127	127	(100)	0	62	61	61	(100)
SURRY 1	117	116	(99 )	1	62	56	56	(100)
SURRY 2	117	116	(99 )	1	62	56	56	(100)
SUSQUEHANNA 1	120	120	(100)	0	56	56	56	(100)
SUSQUEHANNA 2	120	120	(100)	0	56	56	56	(100)
THREE MILE ISLAND 1	128	128	(100)	0	62	55	55	(100)
TURKEY POINT 3	117	117	(100)	0	62	60	59	(98 )
TURKEY POINT 4	117	117	(100)	0	62	60	59	(98 )
VERMONT YANKEE 1	110	110	(100)	0	57	53	53	(100)
VOGTLE 1	124	124	(100)	0	60	54	53	(98 )
VOGTLE 2	124	124	(100)	0	60	56	55	(98 )
WASHINGTON NUCLEAR 2	120	120	(100)	0	56	55	55	(100)
WATERFORD 3	121	121	(100)	0	59	55	55	(100)
WOLF CREEK 1	126	126	(100)	0	60	54	54	(100)
ZION 1	117	117	(100)	0	62	60	59	(98 )
ZION 2	117	117	(100)	0	62	60	59	(98 )
<b>TOTALS / AVERAGES</b>	<b>12898*</b>	<b>12837*</b>	<b>100</b>	<b>61</b>	<b>6487</b>	<b>5892</b>	<b>5939</b>	<b>99</b>

\* Excludes 396 superseded items at the 109 licensed plants

Table 2.3

## **2.4 Status by Issue**

Table 2.4 summarizes information on each TMI issue. For implementation, the table shows the number of applicable plants, the number of plants completed, the percentage completed, and the number of plants remaining. For verification, the table shows whether the issue requires verification, the number of plants covered by the TI, the number of plants requiring verification, the number of plants completed, and the percentage completed.

Of the 172 TMI Action Plan issues, 147 have been fully implemented and 4 have been superseded. Four categories of TMI Action Plan issues account for about 77 percent of the TMI requirements to be implemented: detailed control room design review, with 21 plants yet to complete implementation; accident monitoring, with 10 plants remaining to complete implementation; safety parameter display system, with 8 plants remaining to complete implementation; and B&O Task Force Issues, with 8 plants still open. The next largest contributor is post-accident sampling issues, still open at 5 plants.

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
67.4.1 REACTOR COOLANT PUMP TRIP	72	72	(100)	0	NO				
GL-80-02 NUREG-0737 TECHNICAL SPECIFICATIONS	109	109	(100)	0	NO				
GL-83-36 NUREG-0737 TECHNICAL SPECIFICATIONS	109	109	(100)	0	NO				
I.A.1.1.1 SHIFT TECHNICAL ADVISOR - ON DUTY	109	109	(100)	0	YES	109	109	109	(100)
I.A.1.1.2 SHIFT TECHNICAL ADVISOR - TECH SPECS	109	109	(100)	0	NO				
I.A.1.1.3 SHIFT TECHNICAL ADVISOR - TRAINED PER LL CAT B	109	109	(100)	0	YES	109	109	109	(100)
I.A.1.1.4 SHIFT TECHNICAL ADVISOR - DESCRIBE LONG TERM PROGRAM	109	109	(100)	0	NO				
I.A.1.2 SHIFT SUPERVISOR RESPONSIBILITIES	109	109	(100)	0	YES	109	109	109	(100)
I.A.1.3.1 SHIFT MANNING - LIMIT OVERTIME	109	109	(100)	0	YES	109	109	109	(100)
I.A.1.3.2 SHIFT MANNING - MIN SHIFT CREW	109	109	(100)	0	YES	109	109	109	(100)
I.A.2.1.1 IMMEDIATE UPGRADING OF RO & SRO TRAINING AND QUAL. - SRO EXPER.	108	108	(100)	0	NO				
I.A.2.1.2 IMMEDIATE UPGRADING OF RO & SRO TRAINING AND QUAL. - SRO'S BE RO'S 1YR	108	108	(100)	0	NO				
I.A.2.1.3 IMMEDIATE UPGRADING OF RO & SRO TRAINING AND QUAL. - 3 MO. TRAINING	108	108	(100)	0	NO				
I.A.2.1.4 IMMEDIATE UPGRADING OF RO & SRO TRAINING AND QUAL. - MODIFY TRAINING	108	108	(100)	0	YES	108	108	108	(100)
I.A.2.1.5 IMMEDIATE UPGRADING OF RO & SRO TRAINING AND QUAL. - FACILITY CERTIF	108	108	(100)	0	NO				

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
I.A.2.3 ADMINISTRATION OF TRAINING PROGRAMS	109	109	(100)	0	NO				
I.A.3.1.1 REVISE SCOPE & CRITERIA FOR LICENSING EXAMS - INCREASE SCOPE	109	109	(100)	0	NO				
I.A.3.1.2 REVISE SCOPE & CRITERIA FOR LICENSING EXAMS - INCREASE PASSING GRADE	109	109	(100)	0	NO				
I.A.3.1.3.A REVISE SCOPE & CRIT. FOR LIC. EXAMS - SIMULATOR PLANTS WITH SIMULATORS	80	80	(100)	0	NO				
I.A.3.1.3.B REVISE SCOPE & CRIT. FOR LIC. EXAMS - SIMULATOR - OTHER PLANTS	30	30	(100)	0	NO				
I.B.1.2 EVALUATION OF ORGANIZATION & MANAGEMENT	50	50	(100)	0	NO				
I.C.1.1 SHORT-TERM ACCIDENT & PROCEDURES REVIEW - SB LOCA	109	109	(100)	0	YES	109	109	109	(100)
I.C.1.2.A SHORT-TERM ACCID. & PROCEDURES REV. - INADEQ. CORE COOL. REANAL. GUIDE	109	109	(100)	0	YES	109	92	92	(100)
I.C.1.2.B SHORT-TERM ACCID. & PROCEDURES REV. - INADEQ. CORE COOL. REVISE PROCED	109	109	(100)	0	YES	109	109	109	(100)
I.C.1.3.A SHORT-TERM ACCID. & PROCEDURES REV - TRANSIENTS & ACCDTS. REANAL GUIDE	109	109	(100)	0	YES	109	92	92	(100)
I.C.1.3.B SHORT-TERM ACCID. & PROCEDURES REV. - TRANSIENTS & ACCDRS. REVISE PROC	109	109	(100)	0	YES	109	109	109	(100)
I.C.2 SHIFT & RELIEF TURNOVER PROCEDURES	109	109	(100)	0	YES	109	109	109	(100)
I.C.3 SHIFT-SUPERVISOR RESPONSIBILITY	109	109	(100)	0	YES	109	109	109	(100)
I.C.4 CONTROL-ROOM ACCESS	109	109	(100)	0	YES	109	109	109	(100)
I.C.5 FEEDBACK OF OPERATING EXPERIENCE	109	109	(100)	0	YES	109	109	109	(100)

Table 2.4

S A F E T Y I S S U E M A N A G E M E N T S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
I.C.6 VERIFY CORRECT PERFORMANCE OF OPERATING ACTIVITIES	109	109	(100)	0	YES	109	109	109	(100)
I.C.7.1 NSSS VENDOR REV. OF PROC - LOW POWER TEST PROGRAM	49	49	(100)	0	NO				
I.C.7.2 NSSS VENDOR REV. OF PROC - POWER ASCENSION & EMER. PROCS	49	49	(100)	0	NO				
I.C.8 PILOT MON OF SELECTED EMERGENCY PROC FOR NTOLS	47	47	(100)	0	NO				
I.D.2.1 PLANT-SAFETY PARAMETER DISPLAY CONSOLE - DESCRIPTION	109	109	(100)	0	NO				
I.D.2.2 PLANT-SAFETY PARAMETER DISPLAY CONSOLE - INSTALLED	109	106	(97 )	3	YES	109	49	49	(100)
I.D.2.3 PLANT-SAFETY PARAMETER DISPLAY CONSOLE - FULLY IMPLEMENTED	109	104	(95 )	5	YES	109	39	39	(100)
I.G.1.1 TRAINING DURING LOW-POWER TESTING - PROPOSE TESTS	49	49	(100)	0	NO				
I.G.1.2 TRAINING DURING LOW-POWER TESTING - SUBMIT ANAL. & PROCS.	49	49	(100)	0	NO				
I.G.1.3 TRAINING DURING LOW-POWER TESTING - TRAINING & RESULTS	49	49	(100)	0	NO				
II.B.1.1 REACTOR-COOLANT SYSTEM VENTS - DESIGN VENTS	109	109	(100)	0	NO				
II.B.1.2 REACTOR-COOLANT SYSTEM VENTS - INSTALL VENTS(LL CAT B)	109	109	(100)	0	YES	109	108	108	(100)
II.B.1.3 REACTOR-COOLANT SYSTEM VENTS - PROCEDURES	109	109	(100)	0	YES	109	108	108	(100)
II.B.2.1 PLANT SHIELDING - REVIEW DESIGNS	109	109	(100)	0	NO				
II.B.2.2 PLANT SHIELDING - CORRECTIVE ACTIONS TO ASSURE ACCESS	109	109	(100)	0	NO				

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II.B.2.3 PLANT SHIELDING - PLANT MODIFICATIONS (LL CAT B)	109	109	(100)	0	YES	109	109	109	(100)
II.B.3.1 POSTACCIDENT SAMPLING - INTERIM SYSTEM	108	108	(100)	0	YES	108	102	102	(100)
II.B.3.2 POSTACCIDENT SAMPLING - CORRECTIVE ACTIONS	109	108	(99 )	1	NO				
II.B.3.3 POSTACCIDENT SAMPLING - PROCEDURES	108	106	(98 )	2	NO				
II.B.3.4 POSTACCIDENT SAMPLING - PLANT MODIFICATIONS (LL CAT B)	109	107	(98 )	2	YES	109	109	106	(97 )
II.B.4.1 TRAINING FOR MITIGATING CORE DAMAGE - DEVELOP TRAINING PROGRAM	109	109	(100)	0	NO				
II.B.4.2.A TRAINING FOR MITIGATING CORE DAMAGE - INITIAL	109	109	(100)	0	YES	109	109	109	(100)
II.B.4.2.B TRAINING FOR MITIGATING CORE DAMAGE - COMPLETE	109	109	(100)	0	YES	109	109	109	(100)
II.D.1.1 RELIEF & SAFETY VALVE TEST REQUIREMENTS - SUBMIT PROGRAM	109	109	(100)	0	NO				
II.D.1.2.A RELIEF & SAFETY VALVE TEST REQUIREMENTS - COMPLETE TESTING	109	109	(100)	0	NO				
II.D.1.2.B RELIEF & SAFETY VALVE TEST REQUIREMENTS - PLANT SPECIFIC REPORT	109	109	(100)	0	NO				
II.D.1.3 RELIEF & SAFETY VALVE TEST REQUIREMENTS - BLOCK-VALVE TESTING	69	68	(98 )	1	NO				
II.D.3.1 VALVE POSITION INDICATION - INSTALL DIRECT INDICATIONS OF VALVE POS.	109	109	(100)	0	YES	109	109	109	(100)
II.D.3.2 VALVE POSITION INDICATION - TECH SPECS	109	109	(100)	0	NO				
II.E.1.1.1 AFS EVALUATION-ANALYSIS	72	72	(100)	0	NO				

Table 2.4



S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II E 1.1.2 AFS EVALUATION- SHORT TERM MODS.	71	71	(100)	0	YES	71	71	71	(100)
II E 1.1.3 AFS -LONG TERM MODS.	72	72	(100)	0	YES	72	72	72	(100)
II E 1.2.1.A AFS INITIATION & FLOW- CONTROL GRADE	66	66	(100)	0	YES	66	66	66	(100)
II E 1.2.1.B AFS INITIATION & FLOW - SAFETY GRADE	72	72	(100)	0	YES	72	72	72	(100)
II E 1.2.2.A AFS INITIATION & FLOW - FLOW INDUCTION CONTROL GRADE	67	67	(100)	0	YES	67	67	67	(100)
II E 1.2.2.B AFS INITIATION & FLOW - LL CAT A TECH SPECS.	72	72	(100)	0	NO				
II E 1.2.2.C AFS INITIATION & FLOW - SAFETY GRADE	72	72	(100)	0	YES	72	72	72	(100)
II E 3.1.1 EMERGENCY POWER FOR PRESSURIZER HEATERS - UPGRADE POWER SUPPLY	72	72	(100)	0	YES	72	72	72	(100)
II E 3.1.2 EMERGENCY POWER FOR PRESSURIZER HEATERS - TECH SPECS	72	72	(100)	0	NO				
II E 4.1.1 DEDICATED HYDROGEN PENETRATIONS - DESIGN	107	107	(100)	0	NO				
II E 4.1.2 DEDICATED HYDROGEN PENETRATIONS - REVIEW & REVISE H2 CONTROL PROC	107	107	(100)	0	YES	107	102	100	(98 )
II E 4.1.3 DEDICATED HYDROGEN PENETRATION - INSTALL	107	107	(100)	0	YES	107	104	102	(98 )
II E 4.2.1-4 CONTAINMENT ISOLATION DEPENDABILITY - IMP. DIVERSE ISOLATION	109	107	(98 )	2	YES	109	109	108	(99 )
II E 4.2.5.A CONTAINMENT ISOLAT. DEPENDABILITY - CNTMT PRESS. SETPT. SPECIFY PRESS.	109	109	(100)	0	NO				
II E 4.2.5.B CONTAINMENT ISOLATION DEPENDABILITY - CNTMT PRESSURE SETPT. MODS.	109	109	(100)	0	YES	109	108	107	(99 )

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II.E.4.2.6 CONTAINMENT ISOLATION DEPENDABILITY - CNTMT PURGE VALVES	109	108	(99 )	1	YES	109	108	108	(100)
II.E.4.2.7 CONTAINMENT ISOLATION DEPENDABILITY - RADIATION SIGNAL ON PURGE VALVES	109	109	(100)	0	YES	109	106	105	(99 )
II.E.4.2.8 CONTAINMENT ISOLATION DEPENDABILITY - TECH SPECS	109	109	(100)	0	NO				
II.F.1.1 ACCIDENT-MONITORING - PROCEDURES	109	107	(98 )	2	NO				
II.F.1.2.A ACCIDENT-MONITORING - NOBLE GAS MONITOR	109	107	(98 )	2	YES	109	109	109	(100)
II.F.1.2.B ACCIDENT-MONITORING - IODINE/PARTICULATE SAMPLING	109	107	(98 )	2	YES	109	109	109	(100)
II.F.1.2.C ACCIDENT-MONITORING - CONTAINMENT HIGH-RANGE MONITOR	109	107	(98 )	2	YES	109	109	107	(98 )
II.F.1.2.D ACCIDENT-MONITORING - CONTAINMENT PRESSURE	109	108	(99 )	1	YES	109	109	107	(98 )
II.F.1.2.E ACCIDENT-MONITORING - CONTAINMENT WATER LEVEL	109	108	(99 )	1	YES	109	109	109	(100)
II.F.1.2.F ACCIDENT-MONITORING - CONTAINMENT HYDROGEN	109	109	(100)	0	YES	109	108	107	(99 )
II.F.2.2 INSTRUMENTATION FOR DETECT. OF INADEQUATE CORE COOLING - SUBCOOL METER	72	72	(100)	0	YES	72	72	69	(95 )
II.F.2.3 INSTRUMENTATION FOR DETECT. OF INADEQUATE CORE COOLING - DESC. OTHER	109	109	(100)	0	NO				
II.F.2.4 INSTRUMENTATION FOR DETECT. OF INADEQ CORE CLNG INSTLL ADD'L INSTRMNTATN	108	104	(96 )	4	YES	108	105	94	(89 )
II.G.1.1 POWER SUPP. FOR PRESSURIZER RELIEF,BLOCK VALVES & LEVEL IND. - UPGRADE	72	72	(100)	0	YES	72	72	72	(100)
II.G.1.2 POWER SUPP. FOR PRESSURIZER RELIEF,BLOCK VALVES & LEVEL IND. - TECH SP.	72	72	(100)	0	NO				

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
III A 1.1 EMERGENCY PREPAREDNESS, SHORT TERM	108	108	(100)	0	NO				
III A 1.2.1 UPGRADE EMERGENCY SUPPORT FACILITIES - INTERIM TSC OSC & EOF	109	109	(100)	0	NO				
III A 2.1 UPGRADE PREPAREDNESS - UPGRADE EMERGENCY PLANS TO APP. E. 10 CFR 50	109	109	(100)	0	NO				
III A 2.2 UPGRADE PREPAREDNESS - METEOROLOGICAL DATA	109	109	(100)	0	YES	109	59	59	(100)
III D 1.1.1 PRIMARY COOLANT OUTSIDE CONTAINMENT - LEAK REDUCTION	109	109	(100)	0	YES	109	109	109	(100)
III D 1.1.2 PRIMARY COOLANT OUTSIDE CONTAINMENT - TECH SPECS	50	50	(100)	0	NO				
III D 3.3.1 INPLANT RAD. MONIT - PROVIDE MEANS TO DETER. PRESENCE OF RADIOIODINE	109	109	(100)	0	YES	109	109	109	(100)
III D 3.3.2 INPLANT RADIATION MONIT. - MODIFICATIONS TO ACCURATELY MEAS. IODINE	109	109	(100)	0	YES	109	108	108	(100)
III D 3.4.1 CONTROL ROOM HABITABILITY - REVIEW	109	109	(100)	0	NO				
III D 3.4.2 CONTROL ROOM HABITABILITY - SCHEDULE MODIFICATIONS	109	109	(100)	0	NO				
III D 3.4.3 CONTROL ROOM HABITABILITY - IMPLEMENT MODIFICATIONS	109	108	(99)	1	YES	109	98	81	(82)
II K 1 IE BULLETIN 79-05, 79-06, & 79-08	59	59	(100)	0	NO				
II K 1.10 IE BULLETINS - OPERABILITY STATUS	50	50	(100)	0	NO				
II K 1.17 IE BULLETINS - TRIP LOW LEVEL B/S	28	28	(100)	0	NO				
II K 1.20 IE BULLETINS - PROMPT MANUAL REACTOR TRIP	1	1	(100)	0	NO				

Table 2.4

S A F E T Y I S S U E M A N A G E M E N T S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II.K.1.21 IE BULLETINS - AUTO SG ANTICIPATORY REACTOR TRIP	1	1	(100)	0	NO				
II.K.1.22 IE BULLETINS - AUX. HEAT REM SYSTM. PROC.	14	14	(100)	0	NO				
II.K.1.23 IE BULLETINS - RV LEVEL. PROCEDURES	14	14	(100)	0	NO				
II.K.1.5 IE BULLETINS - REVIEW ESF VALVES	50	50	(100)	0	NO				
II.K.2.10 ORDERS ON B&W PLANTS - SAFETY-GRADE TRIP	7	7	(100)	0	YES	7	7	7	(100)
II.K.2.11 ORDERS ON B&W PLANTS - OPERATOR TRAINING	7	7	(100)	0	YES	7	7	7	(100)
II.K.2.13 ORDERS ON B&W PLANTS - THERMAL MECHANICAL REPORT (CE & W PLANTS ALSO)	70	70	(100)	0	NO				
II.K.2.14 ORDERS ON B&W PLANTS - LIFT FREQUENCY OF PORV'S & SV'S	7	7	(100)	0	NO				
II.K.2.15 ORDERS ON B&W PLANTS - EFFECTS OF SLUG FLOW	7	7	(100)	0	NO				
II.K.2.16 ORDERS ON B&W PLANTS - RCP SEAL DAMAGE	7	7	(100)	0	NO				
II.K.2.17 ORDERS ON B&W PLANTS - VOIDING IN RCS (CE & W PLANTS ALSO)	72	72	(100)	0	NO				
II.K.2.19 BENCHMARK ANALYSIS OF SEQUENTIAL AFW FLOW TO ONCETHROUGH STM GENERATOR	7	7	(100)	0	NO				
II.K.2.2 ORDERS ON B&W PLANTS - PROCEDURES TO CONTROL AFW IND OF ICS	7	7	(100)	0	NO				
II.K.2.20 ORDERS ON B&W PLANTS - SYSTEM RESPONSE TO SB LOCA	7	7	(100)	0	NO				
II.K.2.8 ORDERS ON B&W PLANTS - UPGRADE AFW SYSTEM	7	7	(100)	0	YES	7	6	6	(100)

Table 2.4

S A F E T Y I S S U E M A N A G E M E N T S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II.K.2.9 ORDERS ON B&W PLANTS - FEMA ON ICS	7	7	(100)	0	YES	7	7	7	(100)
II.K.3.1.A B&O TASK FORCE - AUTOMATIC PORV ISOLATION DESIGN	72	72	(100)	0	NO				
II.K.3.1.B FINAL RECOMMENDATIONS, B&O TASK FORCE - AUTO PORV ISO TEST/INSTALL	72	72	(100)	0	YES	72	62	62	(100)
II.K.3.10 B&O TASK FORCE - PROPOSED ANTICIPATORY TRIP MODIFICATIONS	45	45	(100)	0	YES	45	41	41	(100)
II.K.3.11 B&O TASK FORCE - JUSTIFY USE OF CERTAIN PORV	9	9	(100)	0	NO				
II.K.3.12.A B&O TASK FORCE - ANTICIPATORY TRIP ON TURBINE TRIP PROPOSED MODS	50	50	(100)	0	NO				
II.K.3.12.B B&O TASK FORCE - ANTICIPATORY TRIP ON TURBINE TRIP INSTALL MODS.	50	50	(100)	0	YES	50	48	48	(100)
II.K.3.13.A B&O TASK FORCE - HPCI & RCIC SYSTEM INITIATION LEVELS ANALYSIS	33	33	(100)	0	NO				
II.K.3.13.B B&O TASK FORCE - HPCI & RCIC INITIATION LEVELS MODIFICATION	33	31	(93)	2	YES	33	33	33	(100)
II.K.3.14 B&O TASK FORCE - ISO CONDENSER ISOLATION ON HIGH RAD	6	6	(100)	0	YES	6	5	5	(100)
II.K.3.15 B&O TASK FORCE - MODIFY MDCI & RCIC BRK DETECTION CIRCUITRY	33	33	(100)	0	YES	33	33	33	(100)
II.K.3.16.A B&O TASK FORCE - CHALLENGE & FAILURE OF RELIEF VALVES STUDY	37	37	(100)	0	NO				
II.K.3.16.B B&O TASK FORCE - CHALLENGE & FAILURE OF RELIEF VALVES MODIFICATIONS	37	37	(100)	0	YES	37	37	37	(100)
II.K.3.17 B&O TASK FORCE - ECC SYSTEM OUTAGES	95	95	(100)	0	NO				
II.K.3.18.A B&O TASK FORCE - ADS ACTUATION STUDY	36	36	(100)	0	NO				

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II.K.3.18.B B&O TASK FORCE - ADS ACTUATION PROPOSED MODIFICATIONS	36	36	(100)	0	NO				
II.K.3.18.C B&O TASK FORCE - ADS ACTUATION MODIFICATIONS	36	34	(94)	2	YES	36	35	33	(94)
II.K.3.19 B&O TASK FORCE - INTERLOCK RECIRCULATORY PUMP MODIFICATIONS	3	3	(100)	0	YES	3	3	3	(100)
II.K.3.2 B&O TASK FORCE - REPORT ON PORV FAILURES	70	70	(100)	0	NO				
II.K.3.20 B&O TASK FORCE - LOSS OF SVC WATER AT BRP	1	1	(100)	0	YES	1	1	1	(100)
II.K.3.21.A B&O TASK FORCE - RESTART OF CSS & LPCI LOGIC DESIGN	37	37	(100)	0	NO				
II.K.3.21.B B&O TASK FORCE - RESTART OF CSS & LPCI LOGIC DESIGN MODIFICATIONS	37	37	(100)	0	YES	37	35	35	(100)
II.K.3.22.A B&O TASK FORCE - RCIC SUCTION VERIFICATION PROCEDURES	32	32	(100)	0	NO				
II.K.3.22.B B&O TASK FORCE - RCIC SUCTION MODIFICATIONS	32	32	(100)	0	NO				
II.K.3.24 B&O TASK FORCE - SPACE COOLING FOR HPCI/RCI LOSS OF AC POWER	34	34	(100)	0	YES	34	34	34	(100)
II.K.3.25.A B&O TASK FORCE - POWER ON PUMP SEALS PROPOSED MODIFICATIONS	102	102	(100)	0	NO				
II.K.3.25.B B&O TASK FORCE - POWER ON PUMP SEALS MODIFICATIONS	101	101	(100)	0	YES	101	97	97	(100)
II.K.3.27 B&O TASK FORCE - COMMON REFERENCE LEVEL FOR BWRS	37	35	(94)	2	YES	37	37	37	(100)
II.K.3.28 B&O TASK FORCE - QUALIFICATION OF ADS ACCUMULATORS	37	35	(94)	2	YES	37	36	34	(94)
II.K.3.29 B&O TASK FORCE - PERFORMANCE OF ISOLATION CONDENSERS	6	6	(100)	0	NO				

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF TMI ACTION PLAN - SUMMARY BY ITEM

ITEM	IMPLEMENTATION			PLANTS REMAINING	VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED		REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
II.K.3.3 B&O TASK FORCE - REPORTING SV & RV FAILURES AND CHALLENGES	109	109	(100)	0	NO				
II.K.3.30.A B&O TASK FORCE - SCHEDULE FOR OUTLINE OF SB LOCA MODEL	109	109	(100)	0	NO				
II.K.3.30.B B&O TASK FORCE - SB LOCA MODEL, JUSTIFICATION	109	109	(100)	0	NO				
II.K.3.30.C B&O TASK FORCE - SB LOCA METHODS NEW ANALYSES	109	109	(100)	0	NO				
II.K.3.31 B&O TASK FORCE - COMPLIANCE WITH CFR 50.46	109	109	(100)	0	NO				
II.K.3.44 B&O TASK FORCE - EVALUATE TRANSIENT WITH SINGLE FAILURE	37	37	(100)	0	NO				
II.K.3.45 B&O TASK FORCE - ANALYSES TO SUPPORT	36	36	(100)	0	NO				
II.K.3.46 RESPONSE TO LIST OF CONCERNS FROM ACRS CONSULTANT	37	37	(100)	0	NO				
II.K.3.5.A B&O TASK FORCE - AUTO TRIP OF RCP'S PROPOSED MODIFICATIONS	72	72	(100)	0	NO				
II.K.3.5.B B&O TASK FORCE - AUTO TRIP OF RCP'S MODIFICATIONS	72	72	(100)	0	YES	72	66	66	(100)
II.K.3.57 IDENTIFY WATER SOURCES PRIOR TO MANUAL ACTIVATION OF ADS	23	23	(100)	0	YES	23	23	20	(86)
II.K.3.7 B&O TASK FORCE - EVALUATION OF PORV OPENING PROBABILITIES	7	7	(100)	0	NO				
II.K.3.9 B&O TASK FORCE - PID CONTROLLER MODIFICATION	50	50	(100)	0	YES	50	50	50	(100)
MPA-F008 I.D.1.1 DETAILED CONTROL ROOM DESIGN REVIEW PROGRAM PLAN	109	109	(100)	0	NO				
MPA-F063 III.A.1.2 TECHNICAL SUPPORT CENTER	109	109	(100)	0	YES	109	34	34	(100)

Table 2.4

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

S T A T U S   O F   T M I   A C T I O N   P L A N   -   S U M M A R Y   B Y   I T E M

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-F064 III.A.1.2 OPERATIONAL SUPPORT CENTER	109	109	(100)	0	YES	109	48	48	(100)
MPA-F065 III.A.1.2 EMERGENCY OPERATIONS FACILITY	109	109	(100)	0	YES	109	33	33	(100)
MPA-F071 I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	109	88	(80)	21	NO				

Table 2.4



## **2.5 Conclusions**

**After a detailed review of the implementation and verification status of the TMI Action Plan requirements at all licensed plants, the NRC staff has concluded the following:**

- Progress has been made in the implementation of TMI Action Plan requirements at all licensed plants.**
- Licensees continue to make progress toward implementing the remaining requirements. The schedules currently proposed by licensees for completing the remaining items are acceptable and are within the timeframes given to the Commission and to Congress, with the exception of Browns Ferry 1.**
- The NRC closure process for TMI Action Plan items ensures continued adequate protection of the public health and safety.**

**The NRC staff will maintain close watch over the implementation actions and schedules proposed by licensees to ensure that the TMI requirements that remain to be implemented are completed in accordance with regulatory requirements.**

### 3 UNRESOLVED SAFETY ISSUES

This section presents the overall status of implementation and verification of the requirements imposed following the resolution of USIs.

#### 3.1 Implementation Status

Licensees achieve implementation of USI items either by incorporating corrections into the plant design before licensing or by making the modifications necessary to meet requirements at licensed plants. The information presented here includes all USI items related to the 109 licensed plants considered in this report.

Approximately 90 percent of the USI items have been implemented at licensed plants. Of the 1,787 applicable items, 1,610 have been completed and only 177 remain open from an implementation standpoint. On average, each plant has approximately 2 remaining items to implement. No plant has more than 6 remaining items. Figure 3.1 presents the overall status of, and progress on, USIs. Of the 109 licensed plants, 18 have fully implemented all applicable USIs. Table 3.1 lists the number of unimplemented USI items by plant. Appendix B lists the unimplemented USI items by issue and projected implementation dates.

USIs A-44, A-46, and A-47 account for 90 percent of the 177 unimplemented items. Figure 3.2 summarizes the implementation status of these issues. These three USIs are in varying stages of NRC review and licensee implementation, as described below.

- A-44            Station Blackout (A022)

The station blackout rule was issued in July 1988. According to the rule, licensees are required to implement their proposed modifications (hardware and procedural) within 2 years of NRC notification approving the licensee's approach. The staff has completed all of the safety evaluation reviews of licensee responses. About half of the plants have proposed major hardware modifications, while the remaining plants are expected to implement minor hardware and procedure modifications. About 40 percent of the plants have already implemented procedure modifications, and the staff expects that a large majority of licensees will complete implementation of the station blackout rule by the end of 1994.

TI 2515/120 was issued on September 24, 1993, and will be performed at 8 sites, involving all 5 regions, at which time an evaluation will be performed by NRR to determine if additional sites need to be inspected.

- A-46            Seismic Qualification of Equipment in Operating Plants (B105)

The Generic Implementation Procedure, Revision 2 (GIP-2), was developed by the Seismic Qualification Utility Group (SQUG) for implementation of USI A-46. On

## Unresolved Safety Issues Implementation Status at Licensed Plants

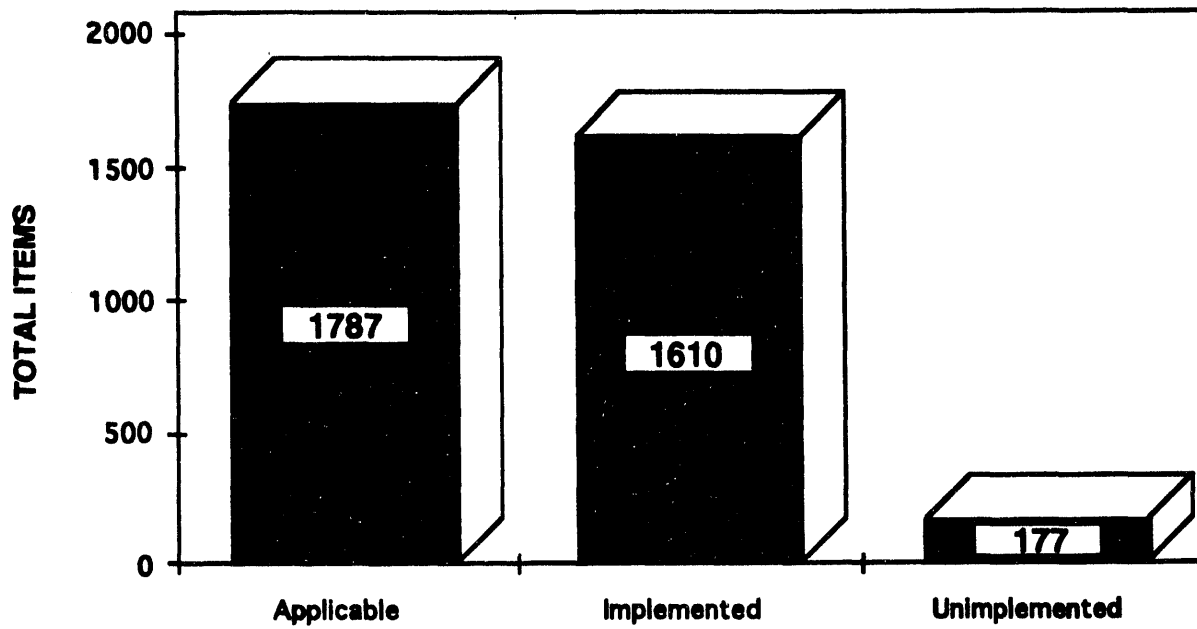


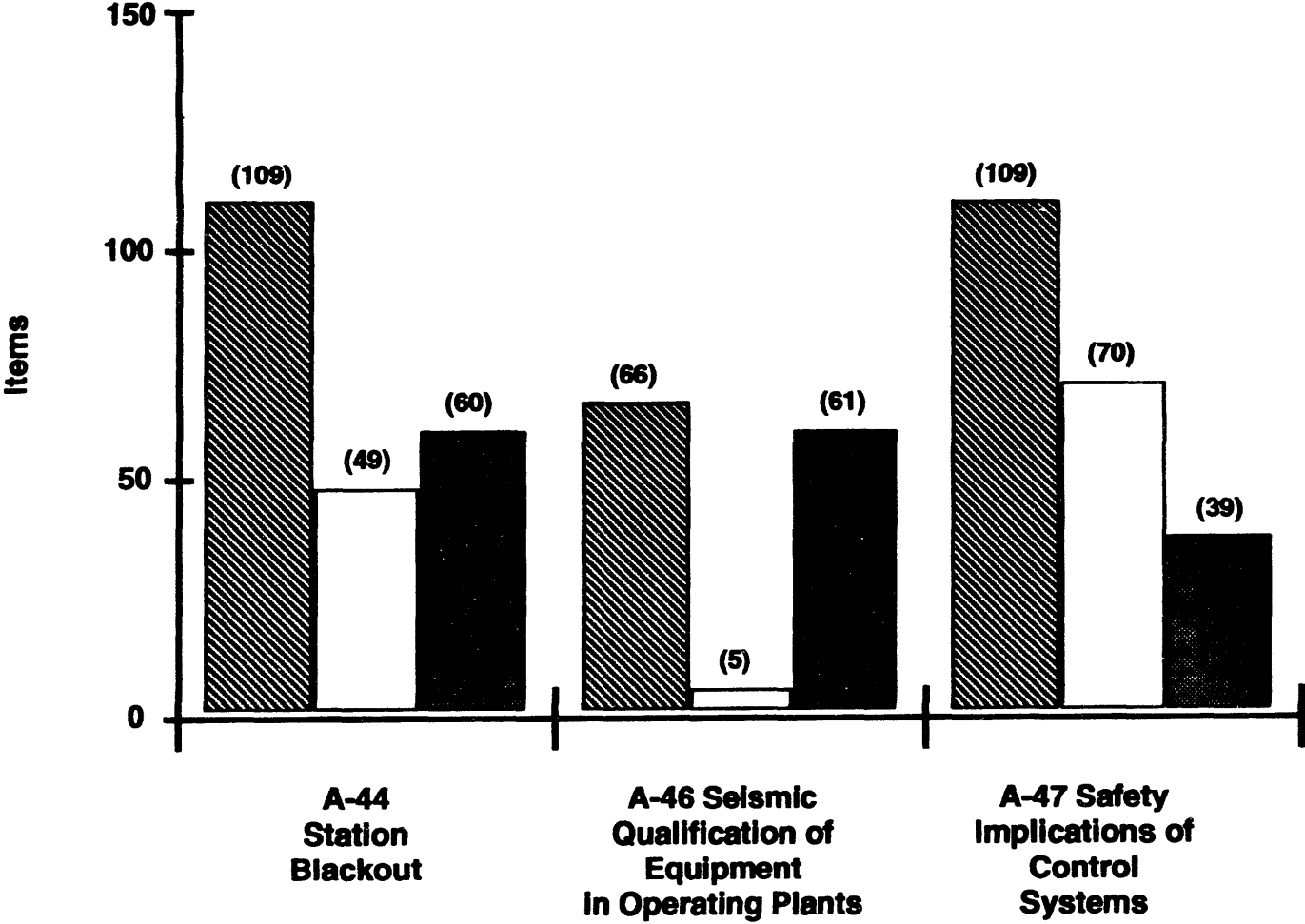
Figure 3.1

**Summary of Unimplemented USI Items by Plant**

<b>PLANT</b>	<b>Items Remaining</b>	<b>PLANT</b>	<b>Items Remaining</b>	<b>PLANT</b>	<b>Items Remaining</b>
Arkansas 1	2	Hatch 1	2	Point Beach 1	2
Arkansas 2	2	Hatch 2	2	Point Beach 2	2
Beaver Valley 1	1	Hope Creek 1	1	Prairie Island 1	1
Big Rock Pt 1	2	Indian Pt 2	2	Prairie Island 2	1
Browns Ferry 1	6	Indian Pt 3	2	Quad Cities 1	4
Browns Ferry 2	2	Kewaunee	2	Quad Cities 2	4
Browns Ferry 3	6	LaSalle 1	1	River Bend 1	2
Brunswick 1	2	LaSalle 2	2	Robinson 2	2
Brunswick 2	2	McGuire 1	1	Salem 1	2
Calvert Cliffs 1	3	McGuire 2	1	Salem 2	2
Calvert Cliffs 2	3	Millstone 1	3	San Onofre 2	2
Catawba 1	1	Millstone 2	3	San Onofre 3	2
Catawba 2	1	Mills'one 3	1	Sequoyah 1	1
Clinton 1	1	Monticello	2	Sequoyah 2	1
Comanche Peak 1	1	Nine Mile Pt 1	2	St. Lucie 1	2
Cook 1	3	Nine Mile Pt 2	1	St. Lucie 2	1
Cook 2	3	North Anna 1	2	Surry 1	2
Cooper Station	2	North Anna 2	2	Surry 2	2
Crystal River 3	3	Oconee 1	2	Susquehanna 1	1
Davis-Besse 1	1	Oconee 2	2	Susquehanna 2	1
Dresden 2	2	Oconee 3	2	Three Mile Island 1	1
Dresden 3	3	Oyster Creek 1	2	Turkey Pt 3	2
Duane Arnold	1	Palisades	3	Turkey Pt 4	2
Farley 1	2	Palo Verde 1	1	Vermont Yankee 1	1
Farley 2	1	Palo Verde 2	1	Vogtle 1	1
Fitzpatrick	3	Palo Verde 3	1	Vogtle 2	1
Ft Calhoun 1	3	Peach Bottom 2	3	Washington Nuclear 2	1
Ginna	2	Peach Bottom 3	3	Waterford 3	2
Grand Gulf 1	1	Perry 1	2	Zion 1	2
Haddam Neck	3	Pilgrim 1	2	Zion 2	2
Harris 1	1				

**Table 3.1**

# Summary of Three Unimplemented USIs



- Legend**
- ▨ Applicable Plants
  - Implemented Plants
  - Unimplemented Plants

Figure 3.2

May 22, 1992, the NRC staff issued its Supplemental Safety Evaluation Report (SSER 2) identifying the conditions under which the GIP-2 resolution is acceptable. Each licensee was required to submit its schedule for implementing the resolution by September 19, 1992. Most licensees have committed to use the GIP-2 as supplemented and clarified by SSER 2 and will provide their seismic evaluations for staff review in 1995. Florida Power Corporation (for Crystal River) and Florida Power and Light (for St. Lucie 1 and Turkey Point) are implementing plant-specific resolutions. In addition, by letter dated August 28, 1991, from Dr. T.E. Murley, the licensee for Maine Yankee was informed it need not respond to A-46.

• **A-47            Safety Implications of Control Systems (B113)**

The primary focus of the resolution of this USI is to provide a mechanism to trip the main feedwater pumps when a high water level occurs in the reactor vessel or steam generators. In 1990, the staff reviewed the licensees' responses to Generic Letter 89-19 and determined that:

- The Westinghouse pressurized-water reactors (PWRs) have completely implemented the GL recommendations in their designs.
- The boiling water reactors (BWRs) (except Oyster Creek and Big Rock Point) and the Combustion Engineering (CE) (except Palo Verde) PWRs concluded that the modifications recommended in the GL are not cost beneficial. The staff has agreed with the BWR Owners Group justification that no further modifications to the existing reactor vessel overfill protection system are necessary. Letters to individual BWR licensees requesting their commitment to the BWROG resolution are being prepared. The staff is continuing its review of the CE Owners Group justification as it relates to assumptions on steam generator tube rupture probability.
- Review of the Babcock & Wilcox (B&W) plants is continuing on a plant-specific basis because the B&W Owners Group has not taken a position on this issue.

Other USI issues with more than 3 open items are discussed below.

• **A-9            Anticipated Transient Without Scram (ATWS) (A020)**

Most operating reactors have installed systems to comply with the ATWS rule. Some of the plants listed as having unimplemented items have systems that are installed and operable but that may require modification or inclusion of a design aspect to fully comply with the ATWS rule. An example of a remaining item that requires resolution before full implementation at the remaining 6 operating plants is General Electric trip unit delivery. Implementation is projected to be completed at all licensed plants by April 1994.

- **A-48            Hydrogen Burns (S003)**

The final hydrogen rule for BWR Mark III and PWR ice condenser containment types was published on January 25, 1985. In September 1989, NUREG-1370, "Resolution of Unresolved Safety Issue A-48, Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment," was published. NUREG-1370 concluded that no additional rule making, requirements, or guidance are necessary. NUREG-1370 stated that there are certain staff actions in the final stages, including completion of the generic SER on the Hydrogen Combine Owners Group (HCOG) report for BWR Mark III containments, and analyses to demonstrate equipment survivability in ice condenser containments. The staff evaluations for these final stages have been completed.

On May 26, 1993, the staff issued its safety evaluation regarding the Catawba and McGuire equipment survivability analyses. The staff concluded that essential equipment in ice condenser containments would survive a wide spectrum of accident sequences involving hydrogen generation.

On June 26, 1993, the staff issued a supplement to its August 6, 1990 evaluation "Acceptance for Referencing of Licensing Topical Report Titled 'Generic Hydrogen Control Information for BWR-6 Mark III Containments - HGN-112-NP.'" This supplement resolves HCOG concerns with the evaluation of August 6, 1990, and enables licensees to finalize and document their plant-specific analyses.

In addition to completing the above reviews relating to Mark III and ice condenser containments, the staff has resolved the recombiner issue of GL 84-09 for plants having Mark I containments but lacking post-accident hydrogen recombiners. Licensees for these facilities have upgraded or committed to upgrade existing nitrogen inerting systems to provide reliable post-accident nitrogen containment atmosphere dilution capability. Safety evaluations have been issued for all Mark 1 plants.

### **3.2    Verification Status**

For generic items such as USIs, NRR issues TIs, when appropriate, to specify which requirements are to be verified by the NRC after licensees have implemented the corrective actions specified in the USI resolution. The NRC performs these inspections, consistent with other inspection priorities, to verify proper implementation of the requirements. Verification is not considered complete until the required inspection is conducted in accordance with the TI, and an inspection report has been issued documenting that requirements have been adequately satisfied by the licensee. On occasion, there may be issues for which the requirements specified in the TI for safety verification inspection are completed before total implementation of all aspects of the issue's resolution by the licensee.

Five TIs have been issued to provide guidance for the field verification of licensee implementation. The TI designations and the corresponding USIs are listed below.

- TI 2500/019 A-26 Reactor Vessel Pressure Transient Protection
- TI 2500/020 A-9 Anticipated Transient Without Scram
- TI 2515/76 A-24 Qualification of Class 1E Safety-Related Equipment
- TI 2515/85 A-7 Mark I Long-Term Program, NUREG-0661, Supplement 1
- TI 2525/120 A-44 Station Blackout

Temporary Instruction (TI) 2515/120, Station Blackout, was issued on September 24, 1993, and will be performed at 8 sites, involving all 5 regions, at which time an evaluation will be performed by NRR to determine if additional sites need to be inspected.

Table 3.2 illustrates the items remaining to be verified for these five USIs. Table 3.3 includes a summary of the verification status for each plant. Of the 423 items requiring NRC verification, 292 items (69 percent) have been completed.



### Summary of USI Items Requiring Verification

<u>USI</u>	<u>Plants Covered</u>	<u>Plants Required</u>	<u>Plants Verified</u>
A-7 Mark I Long-Term Program	24	24	24
A-9 Anticipated Transient Without Scram	109	109	94
A-24 Qualification of Class 1E Safety-Related Equipment	109	109	108
A-26 Reactor Vessel Pressure Transient Protection	72	72	66
A-44 Station Blackout	109	109	0

NOTE: Covered Plants are those for which USIs are applicable.  
 Plants Required are those plants requiring field verification.  
 Plants covered but for which field verification is not necessary have implemented the resolution in a manner not requiring plant hardware changes.

**Table 3.2**

### **3.3 Status by Plant**

**Table 3.3 summarizes information on the status of implementation and verification of USIs at all licensed plants. For each plant, the table shows the total number of applicable items, the number and percentage of items implemented, and the number of items remaining to be implemented. For those USIs that require the NRC to verify implementation actions, the table shows the number of items covered by a TI at each plant, the number of items requiring verification, and the number and percentage of items completed.**

**Eighteen plants have completed all applicable USIs. Two plants have 6 items remaining to be implemented and 2 plants have 4 items remaining to be implemented. The remaining 87 plants have three or less items remaining to be implemented.**

**Five USIs require inspection to verify that implementing actions have been completed. Of the 109 plants, 105 have completed at least 50 percent of the applicable USIs requiring verification. For the remaining 4 plants, NRC verification is complete for 1 of the 4 USIs that are applicable at those plants.**

**Appendix B lists the unimplemented USI items by issue and gives the projected implementation date, where applicable.**

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF USIs - SUMMARY BY PLANT

UNIT	IMPLEMENTATION			VERIFICATION		
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS COVERED	ITEMS REQUIRED	PER CENT COMPLETED
ARKANSAS 1	16	14	(87)	4	4	(75)
ARKANSAS 2	16	14	(87)	4	4	(75)
BEAVER VALLEY 1	16	15	(93)	4	4	(75)
BEAVER VALLEY 2	15	15	(100)	4	4	(75)
BIG ROCK POINT 1	14	12	(85)	3	3	(66)
BRAIDWOOD 1	15	15	(100)	4	4	(75)
BRAIDWOOD 2	15	15	(100)	4	4	(50)
BROWNS FERRY 1	18	12	(66)	4	4	(75)
BROWNS FERRY 2	18	16	(88)	4	4	(50)
BROWNS FERRY 3	18	12	(66)	4	4	(75)
BRUNSWICK 1	18	16	(88)	4	4	(50)
BRUNSWICK 2	18	16	(88)	4	4	(75)
BYRON 1	16	16	(100)	4	4	(75)
BYRON 2	15	15	(100)	4	4	(75)
CALLAWAY 1	16	16	(100)	4	4	(75)
CALLVERT CLIFFS 1	16	13	(81)	4	4	(75)
CALLVERT CLIFFS 2	16	13	(81)	4	4	(75)
CATAMBA 1	16	15	(93)	4	4	(75)
CATAMBA 2	16	15	(93)	4	4	(75)
CLINTON 1	15	14	(93)	3	3	(66)
COMANCHE PEAK 1	15	14	(93)	3	3	(75)
COMANCHE PEAK 2	16	16	(100)	4	4	(50)
COOK 1	17	14	(82)	4	4	(75)
COOK 2	17	14	(82)	4	4	(75)
COOPER STATION	18	16	(88)	4	4	(75)
CRYSTAL RIVER 3	18	16	(88)	4	4	(75)
DAVIS-BESSE 1	16	13	(81)	4	4	(75)
DIABLO CANYON 1	16	15	(93)	4	4	(75)
DIABLO CANYON 2	15	15	(100)	4	4	(75)
DRESDEN 2	18	16	(88)	4	4	(75)
DRESDEN 3	18	15	(83)	4	4	(75)
DU'NE ARNOLD	18	17	(94)	4	4	(75)
FARLEY 1	16	14	(87)	4	4	(75)
FARLEY 2	16	15	(93)	4	4	(75)
FERMI 2	16	16	(100)	4	4	(75)
FITZPATRICK	18	15	(83)	4	4	(75)
FORT CALHOUN 1	16	13	(81)	4	4	(75)
GINNA	16	14	(87)	4	4	(75)
GRAND GULF 1	16	15	(93)	3	3	(66)
HADDAM NECK	18	15	(83)	4	4	(75)
HARRIS 1	18	15	(83)	4	4	(75)
HATCH 1	18	16	(88)	4	4	(75)
HATCH 2	18	16	(88)	4	4	(75)
HOPE CREEK 1	17	16	(94)	4	4	(75)

Table 3.3

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF USIS - SUMMARY BY PLANT

UNIT	IMPLEMENTATION			VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
INDIAN POINT 2	16	14	(87)	4	4	3	(75)
INDIAN POINT 3	16	14	(87)	4	4	3	(75)
KEMUNEE	16	14	(87)	4	4	3	(75)
LASALLE 1	17	16	(94)	3	3	2	(66)
LASALLE 2	16	14	(87)	3	3	2	(66)
LIMERICK 1	16	16	(100)	3	3	2	(66)
LIMERICK 2	16	16	(100)	3	3	2	(66)
MAINE YANKEE	16	16	(100)	4	4	3	(75)
MCGUIRE 1	18	17	(94)	4	4	3	(75)
MCGUIRE 2	18	17	(94)	4	4	3	(75)
MILLSTONE 1	19	16	(84)	4	4	3	(75)
MILLSTONE 2	18	13	(81)	4	4	3	(75)
MILLSTONE 3	16	15	(93)	4	4	3	(75)
MONTICELLO	18	16	(88)	4	4	3	(75)
NINE MILE POINT 1	18	16	(88)	4	4	3	(75)
NINE MILE POINT 2	16	15	(93)	3	3	2	(66)
NORTH ANNA 1	16	14	(87)	4	4	2	(50)
NORTH ANNA 2	17	15	(88)	4	4	2	(50)
OCONEE 1	16	14	(87)	4	4	1	(25)
OCONEE 2	16	14	(87)	4	4	1	(25)
OCONEE 3	16	14	(87)	4	4	1	(25)
OYSTER CREEK 1	18	16	(88)	4	4	3	(75)
PALISADES	16	13	(81)	4	4	3	(75)
PALO VERDE 1	15	14	(93)	4	4	3	(75)
PALO VERDE 2	15	14	(93)	4	4	3	(75)
PALO VERDE 3	15	14	(93)	4	4	3	(75)
PEACH BOTTOM 2	18	15	(83)	4	4	3	(75)
PEACH BOTTOM 3	18	15	(83)	4	4	3	(75)
PERRY 1	15	13	(86)	3	3	2	(66)
PILGRIM 1	18	16	(88)	4	4	3	(75)
POINT BEACH 1	16	14	(87)	4	4	3	(75)
POINT BEACH 2	16	14	(87)	4	4	3	(75)
PRAIRIE ISLAND 1	16	15	(93)	4	4	3	(75)
PRAIRIE ISLAND 2	16	15	(93)	4	4	3	(75)
QUAD CITIES 1	18	14	(77)	4	4	3	(75)
QUAD CITIES 2	18	14	(77)	4	4	3	(75)
RIVER BEND 1	15	13	(86)	3	3	2	(66)
ROBINSON 2	16	14	(87)	4	4	3	(75)
SALEM 1	16	14	(87)	4	4	3	(75)
SALEM 2	17	15	(88)	4	4	3	(75)
SAN OMOFRE 2	16	14	(87)	4	4	3	(75)
SAN OMOFRE 3	16	14	(87)	4	4	3	(75)
SEABROOK 1	15	15	(100)	4	4	3	(75)
SEQUOYAH 1	18	17	(94)	4	4	2	(50)

Table 3.3

# SAFETY ISSUE MANAGEMENT SYSTEM

## STATUS OF USIs - SUMMARY BY PLANT

UNIT	IMPLEMENTATION				VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS REMAINING	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
SEQUOYAH 2	18	17	(94 )	1	4	4	2	(50 )
SOUTH TEXAS 1	15	15	(100)	0	4	4	3	(75 )
SOUTH TEXAS 2	15	15	(100)	0	4	4	3	(75 )
ST LUCIE 1	16	14	(87 )	2	4	4	2	(50 )
ST LUCIE 2	16	15	(93 )	1	4	4	2	(50 )
SUMMER 1	16	16	(100)	0	4	4	3	(75 )
SURRY 1	16	14	(87 )	2	4	4	2	(50 )
SURRY 2	16	14	(87 )	2	4	4	2	(50 )
SUSQUEHANNA 1	17	16	(94 )	1	3	3	2	(66 )
SUSQUEHANNA 2	16	15	(93 )	1	3	3	2	(66 )
THREE MILE ISLAND 1	16	15	(93 )	1	4	4	3	(75 )
TURKEY POINT 3	16	14	(87 )	2	4	4	2	(50 )
TURKEY POINT 4	16	14	(87 )	2	4	4	2	(50 )
VERMONT YANKEE 1	18	17	(94 )	1	4	4	3	(75 )
VOGTLE 1	15	14	(93 )	1	4	4	2	(50 )
VOGTLE 2	16	15	(93 )	1	4	4	1	(25 )
WASHINGTON NUCLEAR 2	16	15	(93 )	1	3	3	2	(66 )
WATERFORD 3	15	13	(86 )	2	4	4	3	(75 )
WOLF CREEK 1	16	16	(100)	0	4	4	3	(75 )
ZION 1	16	14	(87 )	2	4	4	3	(75 )
ZION 2	16	14	(87 )	2	4	4	3	(75 )
<b>TOTALS / AVERAGES</b>	<b>1787</b>	<b>1610</b>	<b>90</b>	<b>177</b>	<b>423</b>	<b>423</b>	<b>292</b>	<b>69</b>

Table 3.3

### 3.4 Status by Issue

Table 3.4 presents summary information on the status of implementation and verification of each USI. For each issue, the table shows the number of applicable plants, the number and percentage of plants that have completed implementation, and the number of plants remaining to complete implementation. For those issues requiring NRC verification of corrective actions, the table shows the number of plants covered by the issue, the number of plants at which verification is required, and the number and percentage of plants that have completed verification.

Of the 27 USIs, 19 have been fully implemented. (USIs A-3, A-4, and A-5 relate to steam generator tube integrity for the three major PWR vendors and are considered separate issues.) Three USIs account for 90 percent of the unimplemented items: A-44, Station Blackout, with 60 plants remaining to complete implementation; A-43, Seismic Qualification of Equipment in Operating Plants, with 61 plants remaining to complete implementation; and A-47, Safety Implication of Control Systems, with 39 plants remaining to complete implementation. These three, largely unimplemented, USIs are in varying stages of NRC review and licensee implementation, as discussed in Section 3.1 of this report. Six plants have not implemented corrective actions for A-9, Anticipated Transient Without Scram, and 6 plants have not implemented corrective actions for USI A-48, Hydrogen Control Measures and Effects of Hydrogen Burns. The remaining USIs have 1 or 2 plants remaining to complete implementation.

NRC inspection to verify licensee implementation is required for five USIs and is complete for USI A-7, Mark I long-term program. Station blackout accounts for 109 of the 292 outstanding verifications.

**SAFETY ISSUE MANAGEMENT SYSTEM**

**STATUS OF USIs - SUMMARY BY ITEM**

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
A-1 WATER HAMMER	109	109	(100)	0	NO				
A-2 ASYMMETRIC BLOWDOWN LOADS ON REACTOR PRIMARY COOLANT SYSTEMS	72	72	(100)	0	NO				
A-3, 4 AND 5 STEAM GENERATOR TUBE INTEGRITY	72	72	(100)	0	NO				
A-6 MARK I SHORT-TERM PROGRAM	23	23	(100)	0	NO				
A-7 MARK I LONG-TERM PROGRAM	24	22	(91 )	2	YES	24	24	24	(100)
A-8 MARK II CONTAINMENT POOL DYNAMIC LOADS LONG-TERM PROGRAM	8	8	(100)	0	NO				
A-9 ATWS	109	103	(94 )	6	YES	109	109	94	(86 )
A-10 BWR FEEDWATER NOZZLE CRACKING	36	36	(100)	0	NO				
A-11 REACTOR VESSEL MATERIALS TOUGHNESS	109	109	(100)	0	NO				
A-17 SYSTEM INTERACTIONS IN NUCLEAR POWER PLANTS	109	109	(100)	0	NO				
A-24 QUALIFICATION OF CLASS IE SAFETY-RELATED EQUIPMENT	109	107	(98 )	2	YES	109	109	108	(99 )
A-28 REACTOR VESSEL PRESSURE TRANSIENT PROTECTION	72	72	(100)	0	YES	72	72	86	(91 )
A-31 RHR SHUTDOWN REQUIREMENTS	51	50	(98 )	1	NO				
A-36 (C010) CONTROL OF HEAVY LOADS OVER SPENT FUEL POOL (PHASE ONE)	109	109	(100)	0	NO				
A-36 (C015) CONTROL OF HEAVY LOADS - PHASE II (FOLLOWUP OF MPAN C-10)	77	77	(100)	0	NO				

Table 3.4

# SAFETY ISSUE MANAGEMENT SYSTEM

## STATUS OF USIs - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
A-39 DETERMINATION OF SRV POOL DYNAMIC LOADS & TEMP. LIMITS FOR BWR CNTMNTS	36	36	(100)	0	NO				
A-40 SEISMIC DESIGN CRITERIA	3	3	(100)	0	NO				
A-42 PIPE CRACKS IN BOILING WATER REACTORS	38	38	(100)	0	NO				
A-43 CONTAINMENT EMERGENCY SUMP PERFORMANCE	109	109	(100)	0	NO				
A-44 STATION BLACKOUT	109	49	(44 )	60	YES	109	109	0	(0 )
A-45 SHUTDOWN DECAY HEAT REMOVAL REQUIREMENTS	109	109	(100)	0	NO				
A-46 SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	86	5	(7 )	81	NO				
A-47 SAFETY IMPLICATION OF CONTROL SYSTEMS	109	70	(64 )	39	NO				
A-48 HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	47	41	(87 )	6	NO				
A-49 PRESSURIZED THERMAL SHOCK	72	72	(100)	0	NO				

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Table 3.4



### **3.5 Conclusions**

**After a detailed review of the implementation and verification status of the resolution of the 27 USIs, the NRC staff has concluded the following:**

- The NRC closure process for USIs ensures continued adequate protection of the public health and safety.**
- All USIs have been resolved by the NRC, and progress has been made in implementing and verifying required changes at plants.**
- Licensees are making adequate progress toward implementing requirements imposed following the NRC's resolution of USIs, and the framework exists to oversee future implementation of delayed items.**
- Although the resolution of USIs involves complex technical issues and analyses, it appears that all required implementation items can be completed in accordance with regulatory requirements.**

## 4 GENERIC SAFETY ISSUES

This section presents the overall status of implementation and verification of GSIs applicable at the 109 licensed plants. Because each GSI may be tracked under different designations, Table 4.1 cross-references the GSI and sub-issue number and the SIMS numbers used in the tables and appendices of this report.

### 4.1 Implementation Status

Licensees achieve implementation of GSI items either by incorporating corrections into the plant design before licensing or by making the modifications necessary to meet the requested actions at licensed plants. The information presented here includes all GSI items related to the 109 licensed plants considered in this report.

Approximately 94 percent of the GSI items have been implemented at licensed plants. Of the 2,621 items, 2,463 have been completed and 158 remain open from an implementation standpoint. On average, each plant has less than 2 items to implement, and no plant has more than 7 remaining items. Figure 4.1 presents the overall status of, and progress on, GSIs. Of the 109 licensed plants, 39 have implemented all applicable GSIs. Table 4.2 lists the number of unimplemented items by unit. Appendix C lists the unimplemented GSI items by issue and projected implementation dates.

Five GSIs have not been implemented at a number of plants for which they are applicable; these account for approximately 90 percent of the unimplemented items. Figure 4.2 summarizes the implementation status of these issues. A brief description of each issue follows.

- GSI 43      Reliability of Air Systems (B107)

In August 1988, the staff issued GL 88-14 to specify the performance of a design and operations verification of instrument air systems and descriptions of licensees' programs for maintaining proper instrument air quality. The staff gave licensees 6 months in which to confirm that these actions had been accomplished or to commit to perform them during a subsequent outage. The licensees for operational plants that still have this issue open are scheduled to complete implementation by the end of 1993. Most of the plants that still have this issue open have completed 80 to 90 percent of the significant recommended actions and are awaiting a suitable outage opportunity to complete the final actions. The staff believes that the planned completion schedules do not pose any significant safety risk.

## GSI Numbers and Corresponding SIMS Item Numbers

<b>SIMS Item No.</b>	<b>GSI No.</b>	<b>MPA No.</b>	<b>SIMS Title</b>
40	40	B065	Safety Concerns Associated With Pipe Breaks in BWR Scram System
41	41	B050	BWR Scram Discharge Volume Systems
GL-88-14	43	B107	Instrument Air Supply System Problems Affecting Safety-Related Equip.
GL-89-13	51	L913	Service Water System Problems Affecting Safety-Related Equipment
67.3.3	67.3.3	A017	Improved Accident Monitoring
70	70	B114	PORV and Block Valve Reliability
75 (B076)	75, Item 1.1	B076	Item 1.1 - Post-Trip Review; Program Description & Procedures
75 (B085)	75, Item 1.2	B085	Item 1.2 - Salem ATWS 1.2 Data Capability
75 (B077)	75, Item 2.1	B077	Item 2.1 - Equipment Classification & Vendor Interface - RTS Component
75 (B086)	75, Item 2.2.1	B086	Item 2.2.1 - Salem ATWS 2.2 S-R Components
GL-90-03	75, Item 2.2.2	L003	Item 2.2.2 - Relaxation of Staff Pos in Gen Letter 83-28, Item 2.2 Part 2
75 (B078)	75, Items 3.1.1 & 3.1.2	B078	Items 3.1.1 & 3.1.2 - Post-Maintenance Test Procedures & Vendor Recomm.
75 (B079)	75, Item 3.1.3	B079	Item 3.1.3 - Post-Maintenance Testing - Changes to Tech Specs - RTS Component
75 (B087)	75, Items 3.2.1 & 3.2.2	B087	Items 3.2.1 & 3.2.2 - Salem ATWS 3.2.1 & 3.2.2 S-R Components
75 (B088)	75, Item 3.2.3	B088	Item 3.2.3 - Salem ATWS 3.2.3 T.S. S-R Components)
75 (B080)	75, Item 4.1	B080	Item 4.1 - Reactor Trip System Reliability - Vendor Related Mods
75 (B081)	75, Items 4.2.1 & 4.2.2	B081	Items 4.2.1 & 4.2.2 - Preventative Maint Prog for Reactor Trip Breakers
75 (B082)	75, Item 4.3	B082	Item 4.3 - Automatic Actuation of Shunt Trip Attach. for West & B&W
75 (B090)	75, Item 4.3	B090	Item 4.3 - Salem ATWS 4.3 W and B&W T.S.
75 (B091)	75, Item 4.4	B091	Item 4.4 - Salem ATWS 4.4 B&W Test Procedures
75 (B092)	75, Item 4.5.1	B092	Item 4.5.1 - Salem ATWS 4.5.1 Diverse Trip Features
75 (B093)	75, Items 4.5.2 & 4.5.3	B093	Items 4.5.2 & 4.5.3 - Salem ATWS 4.5.2 & 4.5.3 Test Alternatives
86	86	B084	Long Range Plan Dealing With Stress Corrosion Cracking in BWR Piping
GL-88-03	93	B098	Resolution of GSI 93, "Steam Binding of Auxiliary Feedwater Pumps"
94	94	B115	Additional Low-Temp Overpressure Protection for LWRs
GL-88-17	99	L817	Loss of Decay Heat Removal
124	124	S001	Auxiliary Feedwater System Reliability
GL-80-099	A-13	B107	Technical Specification Revision for Snubber Surveillance
GL-84-13	A-13	B022	Technical Specification for Snubbers
A-16	A-16	D012	Steam Effects on BWR Core Spray Distribution
MPA-B023	A-35	B023	Degraded Grid Voltage
B-10	B-10	S008	Behavior of BWR Mark III Containments
B-36	B-36	none	Dev Design, Test & Maint Criteria for Atmo Cleanup Sys Air Filter & Adsorption Units
GL-80-014	B-63	B045	LWR Primary Coolant System Pressure Isolation Valves

**Table 4.1**

## Generic Safety Issues Implementation Status at Licensed Plants

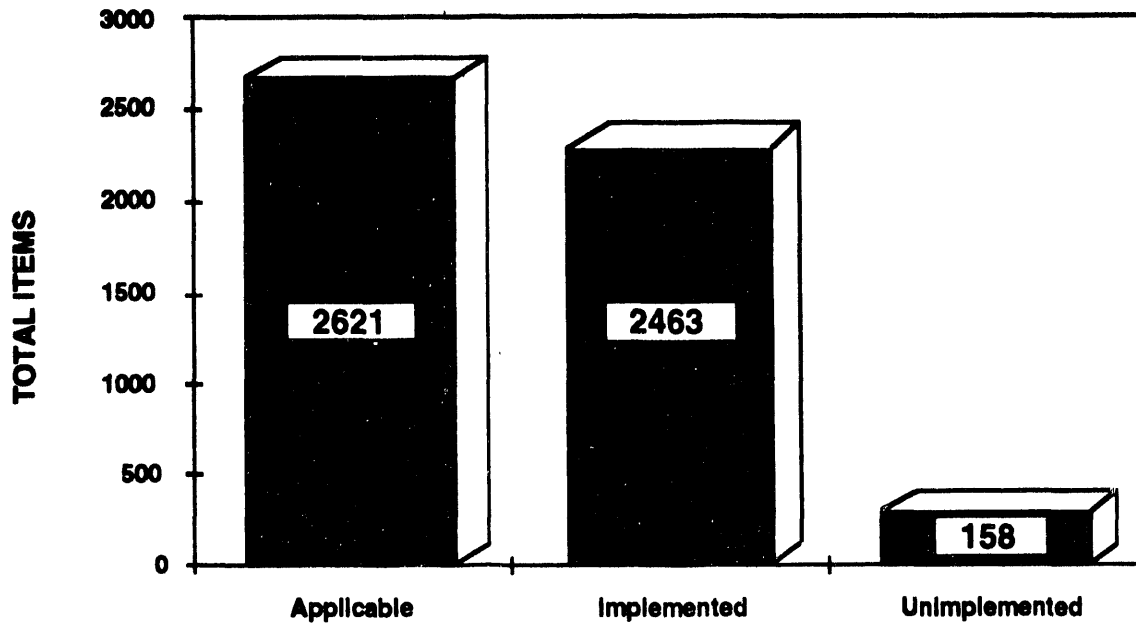


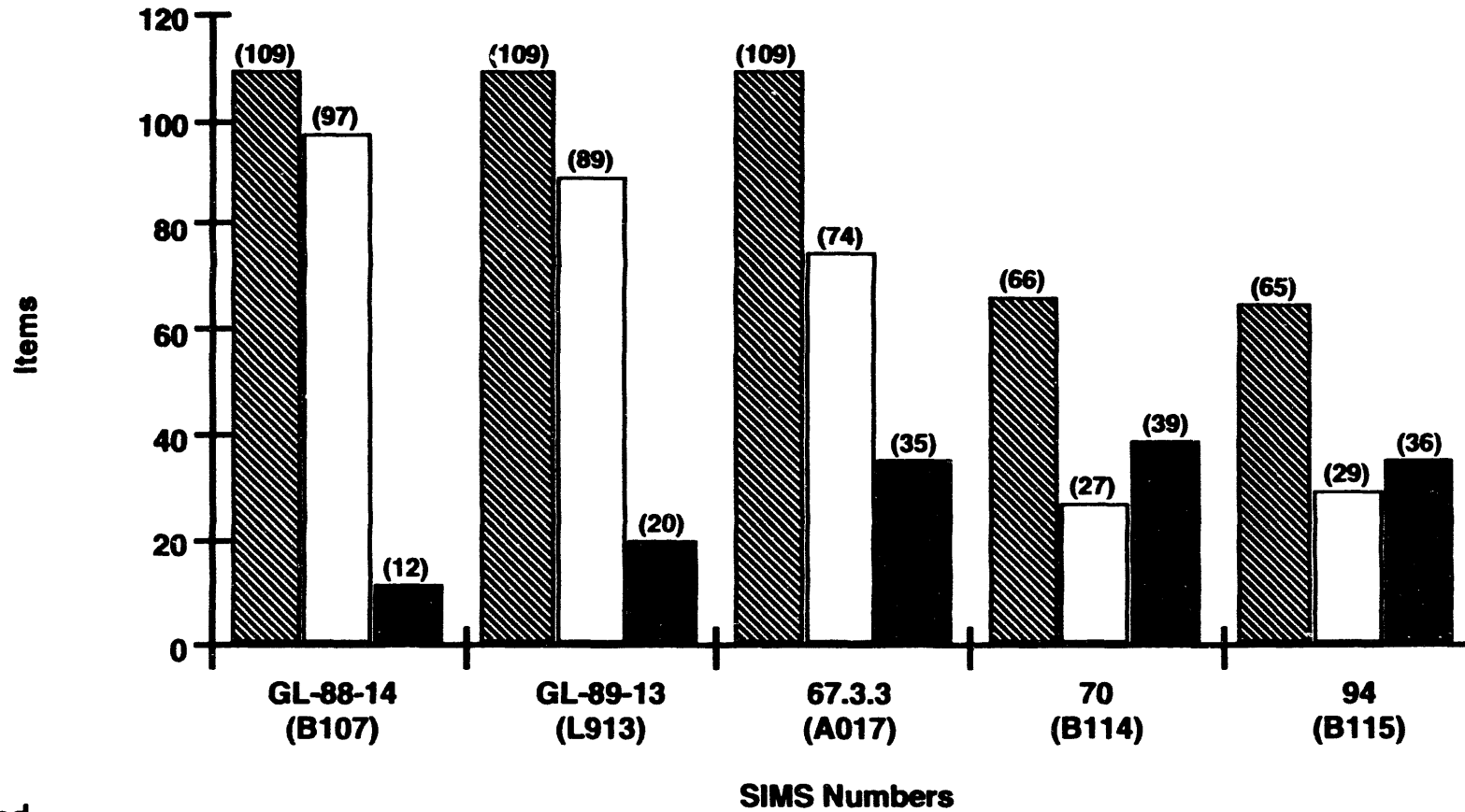
Figure 4.1

**Summary of Unimplemented GSI Items by Plant**

<b>PLANT</b>	<b>Items Remaining</b>	<b>PLANT</b>	<b>Items Remaining</b>	<b>PLANT</b>	<b>Items Remaining</b>
Arkansas 2	1	Haddam Neck	4	Palo Verde 2	1
Beaver Valley 1	3	Hatch 1	1	Perry 1	2
Beaver Valley 2	2	Hatch 2	1	Point Beach 1	2
Braidwood 1	1	Indian Pt 2	3	Point Beach 2	2
Braidwood 2	2	Indian Pt 3	2	Quad Cities 1	2
Browns Ferry 1	6	Kewaunee	3	Quad Cities 2	3
Browns Ferry 2	2	LaSalle 1	1	Robinson 2	2
Browns Ferry 3	7	LaSalle 2	1	Salem 1	2
Calvert Cliffs 1	4	Maine Yankee	2	Salem 2	2
Calvert Cliffs 2	5	McGuire 1	4	San Onofre 2	1
Catawba 1	2	McGuire 2	4	San Onofre 3	1
Catawba 2	2	Millstone 1	3	South Texas 1	3
Cook 1	3	Millstone 2	3	South Texas 2	3
Cook 2	3	Millstone 3	3	St. Lucie 1	1
Cooper Station	1	Nine Mile Pt 1	1	St. Lucie 2	1
Crystal River 3	5	Nine Mile Pt 2	1	Summer 1	3
Dresden 2	1	North Anna 1	2	Surry 1	2
Dresden 3	2	North Anna 2	2	Surry 2	2
Farley 1	1	Oconee 1	1	Turkey Pt 3	2
Farley 2	1	Oconee 2	1	Turkey Pt 4	2
Fermi 2	1	Oconee 3	1	Wolf Creek 1	1
Ft Calhoun 1	3	Oyster Creek 1	2	Zion 1	4
Ginna	4	Palisades	1	Zion 2	4
Grand Gulf 1	1				

Table 4.2

## Summary of Five Unimplemented GSIs



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### Legend

▨ Total

□ Implemented

■ Unimplemented

Figure 4.2

- GSI 51 Proposed Requirements for Improving the Reliability of Open-Cycle Service Water Systems (L913)

This issue was developed as a result of uncertainties regarding the compliance of service water systems with the regulations. In July 1989, the staff issued GL 89-13 requesting licensees to take certain actions and establish programs to ensure continued compliance of their service water systems with the applicable regulations. The staff asked licensees to submit implementation plans and schedules by early 1990. The actions and programs have been implemented at approximately 80 percent of all plants. Temporary Instruction TI2515/118 was issued on December 29, 1992, to assess the licensees' planned or completed actions in response to GL 89-13. The staff considers the status of this GSI acceptable.

- GSI 67.3.3 Improved Accident Monitoring (A017)

This issue addresses conformance with RG 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident." The staff issued GL 82-33 in December 1982 to request licensees to submit schedules and details of their plans to implement the provisions of RG 1.97, Revision 2. The licensee responses to this generic letter prompted the staff to issue confirmatory orders in 1985. Because the industry has taken exception to and appealed some of the provisions of RG 1.97, Revision 2, implementation is incomplete at many plants.

The issue of Category 1 neutron flux monitoring system at BWRs has been resolved, although some PWR licensees have yet to install Category 2 qualified instrumentation to monitor containment sump water temperature. The staff is seeking closure on the PWR issue on a generic basis. Some other plant-specific issues still remain, and supplemental safety evaluations are being prepared to close those issues.

- GSI 70 PORV and Block Valve Reliability (B114), and
- GSI 94 Additional Low-Temperature Overpressure Protection for Light-Water Reactors (B115)

The staff determined that the low-temperature overpressure protection (LTOP) system unavailability is the dominant contributor to risk from low-temperature overpressure transients. The staff further concluded that a substantive improvement in availability, when the potential for an overpressure event is the highest, and especially during water-solid operations, can be achieved through improved administrative restrictions on the LTOP system.

The staff considered the conditions under which a low-temperature overpressure transient is most likely to occur. While LTOP is required for all shutdown models, the most vulnerable period was found to be MODE 5 (cold shutdown) with the

reactor coolant temperature less than or equal to 200°F. The basis of the detailed evaluation of operating reactor experiences performed in support of GI-94. LTOP transients that have challenged the system have occurred with reactor coolant temperatures in the range of 80°F to 190°F. In addition, a review of the STS for containment integrity indicates that there are no specific requirements imposed during MODE 5, when the reactor coolant temperature is below 200°F. Industry responses to GL 87-12, "Loss of RHR While RCS Partially Filled," dated July 9, 1987, also indicate that containment integrity during MODE 5 is often relaxed to allow for testing, maintenance, and the repair of equipment.

In all instances when pressure/temperature limits in the TS have been exceeded, one LTOP channel was removed from service for maintenance-related activities. During these events the redundant LTOP channel failed to mitigate the overpressure transient as a result of a system/component failure that had not been detected.

The current 7-day AOT for a single channel is considered to be too long under certain conditions. The staff concluded that the AOT for a single channel should be reduced to 24 hours when operating in MODE 5 or 6 when the potential for an overpressure transient is highest. The operating reactor experiences indicate that these events occur during planned heatup (restart of an idle reactor coolant pump) or as a result of maintenance and testing errors while in MODE 5. The reduced AOT for a single channel in MODES 5 and 6 will help to emphasize the importance of the LTOP system in mitigating overpressure transients and provide additional assurance that plant operation is consistent with the design basis transient analyses.

On the basis of the forgoing concerns, added assurance of LTOP availability is to be provided by revising the current technical specification for overpressure protection to reduce the AOT for a single channel from 7 days to 24 hours when the plant is operating in MODES 5 and 6. The guidance provided also is applicable to plants that rely on both PORVs and RHR SRVs or that rely on RHR SRVs only.

#### 4.2 Verification Status

For generic items such as GSIs, NRR issues TIs for those items that need to be verified in the field by the NRC staff after licensees have implemented the actions specified in the GSI resolution. The NRC performs these inspections, consistent with other inspection priorities, to verify proper implementation of the requirements. Verification is not considered complete until the required inspection is conducted in accordance with the TI and an inspection report has been issued documenting that the requirements have been adequately satisfied by the licensee. On occasion, there may be issues for which the requirements specified in a TI for safety verification inspection are completed before full implementation of all aspects of the issue's resolution by the licensee. Of the 1,176 items requiring NRC verification, 1,045 (89 percent) have been completed.



**Eight TIs provide guidance for the field verification of licensee implementation of GSIs. TI designations and the corresponding GSIs are provided in Table 4.3. Table 4.4 summarizes the items remaining to be verified.**

Temporary Instructions for Resolved GSIs

<u>SIMS Item</u>	<u>SIMS Title</u>	<u>TI</u>
41	BWR SCRAM DISCHARGE VOLUME SYSTEM	2515/090
67.3.3	IMPROVED ACCIDENT MONITORING	2515/087
75 (B077)	ITEM 2.1 - EQUIPMENT CLASSIFICATION & VENDOR INTERFACE - RTS COMPONENT	2515/064
75 (B078)	ITEMS 3.1.1 & 3.1.2 - POST MAINTENANCE TEST PROCEDURES & VENDOR RECOMM.	2515/064
75 (B079)	ITEMS 3.1.3 - POST MAINTENANCE TESTING - CHANGES TO TECH SPECS - RTS COMPONENT	2515/064
75 (B080)	ITEM 3.1 - REACTOR TRIP SYSTEM RELIABILITY - VENDOR RELATED MODS	2515/091
75 (B081)	ITEMS 4.2.1 & 4.2.2 - PREVENTIVE MAINTENANCE PROGRAM FOR REACTOR TRIP BREAKERS SALEM ATWS 3.2.1 & 3.2.2 S-R COMPONENTS	2515/064
75 (B086)	SALEM ATWS 2.2 S-R COMPONENTS	2515/064
75 (B087)	SALEM ATWS 3.2.1 & 3.2.2 S-R COMPONENTS	2515/064
75 (B088)	SALEM ATWS 3.2.3 T.S. S-R COMPONENTS	2515/064
75 (B092)	SALEM ATWS 4.5.1 - DIVERSE TRIP FEATURES	2515/064
86	LONG RANGE PLAN DEALING WITH STRESS CORROSION CRACKING IN BWR PIPING	2515/089
GL-88-17	LOSS OF DECAY HEAT REMOVAL	2515/101 2515/103
GL-89-13	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPMENT	2515/118

Table 4.3

## Summary of GSI Items Requiring Verification

<u>SIMS Item</u>	<u>Plants Covered</u>	<u>Plants Required</u>	<u>Plants Verified</u>
41      BWR SCRAM DISCHARGE VOLUME SYSTEMS	37	37	36
67.3.3    IMPROVED ACCIDENT MONITORING	109	108	94
75 (B080)    ITEM 4.1 - REACTOR TRIP SYSTEM RELIABILITY - VENDOR RELATED MODS	72	72	71
86      LONG RANGE PLAN DEALING WITH STRESS CORROSION CRACKING IN BWR PIPING	36	36	34
GL-88-17    LOSS OF DECAY HEAT REMOVAL	72	72	66
GL-89-13    SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPMENT	109	107	0

NOTE: Plants Covered are those for which GSIs are applicable.  
 Plants Required are those plants requiring field verification.  
 Plants covered but for which field verification is not necessary have implemented the resolution in a manner not requiring plant hardware changes.

**Table 4.4**

### **4.3 Status by Plant**

**Table 4.5 summarizes the status of implementation and verification of GSIs at all licensed plants. For each plant, the table shows the total number of applicable items, the number and percentage of items implemented, and the number of items remaining to be implemented. For those GSIs that require NRC to verify implementation of corrective actions, the table shows the number of items covered by the TIs at each plant, the number of items requiring verification, and the number and percentage of items completed. Appendix C lists the unimplemented GSI items by issue and gives projected implementation dates.**

**Of the 109 plants, 39 have completely implemented all GSI items. Forty-seven plants have completed implementation actions for all except 1 or 2 GSIs; 19 plants have 3 or 4 items to implement; and the remaining 4 plants have 5 to 7 items to implement.**

**Of the 109 plants, one plant has completed all of the items requiring verification by inspection (in accordance with a TI); 107 plants have completed all but 1 or 2 items requiring verification; and one plant has completed all but 3 items.**

**SAFETY ISSUE MANAGEMENT SYSTEM**

**STATUS OF GSIS - SUMMARY BY PLANT**

UNIT	IMPLEMENTATION			VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
ARKANSAS 1	27	27	(100)	12	4	3	(75)
ARKANSAS 2	25	24	(95)	12	4	3	(75)
BEAVER VALLEY 1	26	23	(88)	12	12	11	(91)
BEAVER VALLEY 2	27	25	(92)	12	4	3	(75)
BIG ROCK POINT 1	21	21	(100)	11	10	9	(81)
BRAIDWOOD 1	27	26	(96)	12	12	11	(91)
BRAIDWOOD 2	21	25	(92)	12	12	11	(91)
BROWNS FERRY 1	21	15	(71)	11	11	9	(81)
BROWNS FERRY 2	21	19	(90)	11	11	10	(90)
BROWNS FERRY 3	21	14	(66)	11	11	9	(81)
BRUNSWICK 1	19	19	(100)	11	11	10	(90)
BRUNSWICK 2	19	19	(100)	11	11	10	(90)
BYRON 1	27	27	(100)	12	12	11	(91)
BYRON 2	27	27	(100)	12	12	11	(91)
CALLAWAY 1	26	26	(100)	12	12	11	(91)
CALVERT CLIFFS 1	23	19	(82)	12	12	11	(91)
CALVERT CLIFFS 2	23	18	(78)	12	12	11	(91)
CATAMBA 1	27	25	(92)	12	12	11	(91)
CATAMBA 2	27	25	(92)	12	12	11	(91)
CLINTON 1	21	21	(100)	12	12	11	(91)
COMANCHE PEAK 1	26	26	(100)	11	11	10	(90)
COMANCHE PEAK 2	26	26	(100)	12	11	11	(100)
COOK 1	25	22	(87)	12	11	8	(72)
COOK 2	25	22	(87)	12	12	11	(91)
COOPER STATION	21	22	(104)	12	12	11	(91)
CRYSTAL RIVER 3	27	20	(74)	11	4	3	(75)
DAV. S-BESSE 1	26	22	(81)	12	12	11	(91)
DIABLO CANYON 1	26	26	(100)	12	12	10	(83)
DIABLO CANYON 2	26	26	(100)	12	12	11	(91)
DRESDEN 2	20	26	(130)	12	12	11	(91)
DRESDEN 3	20	19	(94)	11	11	9	(81)
DUANE ARNOLD	21	18	(85)	11	11	9	(81)
FARLEY 1	26	21	(80)	11	11	10	(90)
FARLEY 2	26	25	(96)	12	12	11	(91)
FERMI 2	21	25	(119)	12	12	11	(91)
FITZPATRICK	21	20	(95)	11	11	11	(100)
FORT CALHOUN 1	25	22	(87)	12	11	10	(90)
GINNA	26	22	(84)	12	9	8	(88)
GRAND GULF 1	21	22	(104)	12	12	11	(91)
HADDAM NECK	26	20	(77)	11	11	9	(81)
HARRIS 1	27	22	(81)	12	12	11	(91)
HATCH 1	21	20	(95)	11	11	10	(90)
HATCH 2	21	20	(95)	11	11	10	(90)
HOPE CREEK 1	22	22	(100)	11	4	3	(75)

Table 4.5

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF GSIS - SUMMARY BY PLANT

UNIT	IMPLEMENTATION			VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
INDIAN POINT 2	25	22	(87)	12	12	11	(91)
INDIAN POINT 3	26	24	(92)	12	12	11	(91)
KEMAUNEE	25	22	(87)	12	12	11	(91)
LASALLE 1	22	21	(95)	11	11	9	(81)
LASALLE 2	22	21	(95)	11	11	9	(81)
LIMERICK 1	20	20	(100)	11	4	3	(75)
LIMERICK 2	20	20	(100)	11	4	3	(75)
MAINE YANKEE	24	22	(91)	12	12	11	(91)
MCGUIRE 1	26	22	(84)	12	12	11	(91)
MCGUIRE 2	28	22	(84)	12	12	11	(91)
MILLSTONE 1	21	18	(85)	11	11	10	(90)
MILLSTONE 2	24	22	(91)	12	12	11	(91)
MILLSTONE 3	27	24	(88)	12	4	3	(75)
MONTICELLO	20	20	(100)	11	11	10	(90)
NINE MILE POINT 1	22	21	(95)	11	11	10	(90)
NINE MILE POINT 2	22	21	(95)	11	4	3	(75)
NORTH ANNA 1	26	24	(92)	12	12	11	(91)
NORTH ANNA 2	26	24	(92)	12	12	11	(91)
OCONEE 1	26	25	(96)	12	12	10	(83)
OCONEE 2	26	25	(96)	12	12	10	(83)
OCONEE 3	26	25	(96)	12	12	10	(83)
OYSTER CREEK 1	22	20	(90)	11	11	10	(90)
PALISADES	24	22	(91)	12	12	10	(83)
PALO VERDE 1	23	23	(100)	12	12	11	(91)
PALO VERDE 2	23	22	(95)	12	12	11	(91)
PALO VERDE 3	23	23	(100)	12	12	11	(91)
PEACH BOTTOM 2	21	21	(100)	11	11	10	(90)
PEACH BOTTOM 3	21	21	(100)	11	11	10	(90)
PERRY 1	22	20	(90)	11	11	10	(90)
PILGRIM 1	21	21	(100)	11	11	10	(90)
POINT BEACH 1	25	23	(91)	12	12	10	(83)
POINT BEACH 2	25	23	(91)	12	12	10	(83)
PRAIRIE ISLAND 1	26	26	(100)	12	12	11	(91)
PRAIRIE ISLAND 2	26	26	(100)	12	12	11	(91)
QUAD CITIES 1	21	19	(90)	11	11	9	(81)
QUAD CITIES 2	21	18	(85)	11	11	9	(81)
RIVER BEND 1	20	20	(100)	10	3	2	(66)
ROBINSON 2	26	24	(92)	12	12	11	(91)
SALEM 1	26	24	(92)	12	12	11	(91)
SALEM 2	26	24	(92)	12	12	11	(91)
SAN ONOFRE 2	24	23	(95)	12	12	11	(91)
SAN ONOFRE 3	24	23	(95)	12	12	11	(91)
SEABROOK 1	27	27	(100)	12	12	11	(91)
SEQUOYAH 1	27	27	(100)	12	12	10	(83)

Table 4.5

# SAFETY ISSUE MANAGEMENT SYSTEM

## STATUS OF GSIs - SUMMARY BY PLANT

UNIT	IMPLEMENTATION				VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS REMAINING	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
SEQUOYAH 2	27	27	(100)	0	12	12	10	(83)
SOUTH TEXAS 1	27	24	(88)	3	12	12	11	(91)
SOUTH TEXAS 2	27	24	(88)	3	12	6	5	(83)
ST LUCIE 1	24	23	(95)	1	12	12	11	(91)
ST LUCIE 2	25	24	(95)	1	12	12	11	(91)
SUMMER 1	26	23	(88)	3	12	12	11	(91)
SURRY 1	26	24	(92)	2	12	12	11	(91)
SURRY 2	26	24	(92)	2	12	12	11	(91)
SUSQUEHANNA 1	20	20	(100)	0	11	11	10	(90)
SUSQUEHANNA 2	20	20	(100)	0	11	11	10	(90)
THREE MILE ISLAND 1	25	25	(100)	0	12	12	11	(91)
TURKEY POINT 3	25	23	(91)	2	12	12	10	(83)
TURKEY POINT 4	25	23	(91)	2	12	12	10	(83)
VERMONT YANKEE 1	21	21	(100)	0	11	11	10	(90)
VOGTLE 1	27	27	(100)	0	12	12	11	(91)
VOGTLE 2	27	27	(100)	0	12	12	11	(91)
WASHINGTON NUCLEAR 2	21	21	(100)	0	11	11	10	(90)
WATERFORD 3	23	23	(100)	0	12	4	3	(75)
WOLF CREEK 1	27	26	(96)	1	12	12	11	(91)
ZION 1	26	22	(84)	4	12	12	11	(91)
ZION 2	26	22	(84)	4	12	12	11	(91)
<b>TOTALS / AVERAGES</b>	<b>2621</b>	<b>2463</b>	<b>94</b>	<b>158</b>	<b>1270</b>	<b>1176</b>	<b>1045</b>	<b>88</b>

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Table 4.5

#### **4.4 Status by Issue**

Table 4.6 summarizes the status of implementation and verification of each GSI and sub-issue. For each issue, the table shows the number of applicable plants, the number and percentage of plants that have completed implementation, and the number of plants remaining to complete implementation. For those issues requiring verification of corrective actions, the table shows the number of plants covered by a TI, the number of plants requiring verification, and the number and percentage of plants that have completed verification.

Of the 34 GSIs and sub-issues, 19 have been fully implemented. Five issues remain to be implemented at only one plant each and 5 more issues remain to be implemented at two or three plants each. The 5 issues discussed in Section 4.1 of this report account for 142 (90 percent) of the 158 items remaining to be implemented.



**SAFETY ISSUE MANAGEMENT SYSTEM**

**STATUS OF GSIs - SUMMARY BY ITEM**

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
40 SAFETY CONCERNS ASSOCIATED WITH PIPE BREAKS IN BWR SCRAM SYSTEM	33	31	(93 )	2	NO				
41 BWR SCRAM DISCHARGE VOLUME SYSTEMS	37	36	(97 )	-1	YES	37	37	36	(97 )
67.3.3 IMPROVED ACCIDENT MONITORING	109	74	(67 )	35	YES	109	108	94	(87 )
70 PORV AND BLOCK VALVE RELIABILITY	66	27	(40 )	39	NO				
75 (B076) ITEM 1.1 - POST TRIP REVIEW; PROGRAM DESCRIPTION & PROCEDURES	109	109	(100)	0	NO				
75 (B077) ITEM 2.1 - EQUIPMENT CLASSIFICATION & VENDOR INTERFACE - RTS COMPONENT	109	109	(100)	0	YES	109	96	96	(100)
75 (B078) ITEMS 3.1.1 & 3.1.2 -POST MAINTENANCE TEST PROCEDURES & VENDOR RECOMM.	109	109	(100)	0	YES	109	97	97	(100)
75 (B079) ITEM 3.1.3 - POST MAINTENANCE TESTING - CHANGES TO TECH SPECS - RTS CO	109	109	(100)	0	YES	109	97	97	(100)
75 (B080) ITEM 4.1 - REACTOR TRIP SYSTEM RELIABILITY - VENDOR RELATED MODS	72	72	(100)	0	YES	72	72	71	(98 )
75 (B081) ITEMS 4.2.1 & 4.2.2 -PREVENTATIVE MAINT PROG FOR REACTOR TRIP BREAKERS	72	72	(100)	0	YES	72	66	66	(100)
75 (B082) ITEM 4.3 - AUTOMATIC ACTUATION OF SHUNT TRIP ATTACH. FOR WEST & B&W	57	57	(100)	0	NO				
75 (B085) SALEM ATWS 1.2 DATA CAPABILITY	109	106	(97 )	3	NO				
75 (B086) SALEM ATWS 2.2 S-R COMPONENTS	109	109	(100)	0	YES	109	97	97	(100)
75 (B087) SALEM ATWS 3.2.1 & 3.2.2 S-R COMPONENTS	109	109	(100)	0	YES	109	97	97	(100)
75 (B088) SALEM ATWS 3.2.3 T.S. S-R COMPONENTS	109	109	(100)	0	YES	109	97	97	(100)

Table 4.6

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF GSIs - SUMMARY BY ITEM

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ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
75 (B090) SALEM ATWS 4.3 W AND B&W T.S.	57	56	(98 )	1	NO				
75 (B091) SALEM ATWS 4.4 B&W TEST PROCEDURES	7	6	(85 )	1	NO				
75 (B092) SALEM ATWS 4.5.1 DIVERSE TRIP FEATURES	109	109	(100)	0	YES	109	97	97	(100)
75 (B093) SALEM ATWS 4.5.2 & 4.5.3 TEST ALTERNATIVES	109	107	(98 )	2	NO				
86 LONG RANGE PLAN DEALING WITH STRESS CORROSION CRACKING IN BWR PIPING	36	36	(100)	0	YES	36	36	34	(94 )
94 ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	65	29	(44 )	36	NO				
124 AUXILIARY FEEDWATER SYSTEM RELIABILITY	6	5	(83 )	1	NO				
A-16 STEAM EFFECTS ON BWR CORE SPRAY DISTRIBUTION	2	2	(100)	0	NO				
B-10 BEHAVIOR OF BWR MARK III CONTAINMENTS	4	4	(100)	0	NO				
B-36 DEV DESIGN, TEST & MAINT CRITERIA FOR ATM CLEANUP SYS AIR FILTER & ADSO	26	26	(100)	0	NO				
GL-80-014 LWR PRIMARY COOLANT SYSTEM PRESSURE ISOLATION VALVES	107	106	(99 )	1	NO				
GL-80-099 TECHNICAL SPECIFICATION REVISION FOR SNUBBER SURVEILLANCE	100	100	(100)	0	NO				
GL-84-13 TECHNICAL SPECIFICATION FOR SNUBBERS	95	95	(100)	0	NO				
GL-88-14 INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	109	97	(88 )	12	NO				
GL-88-03 RESOLUTION OF GENERIC SAFETY ISSUE 93. "STEAM BINDING OF AUXILIARY FEE	72	72	(100)	0	NO				

Table 4.6

**SAFETY ISSUE MANAGEMENT SYSTEM**

**STATUS OF GSIs - SUMMARY BY ITEM**

ITEM	IMPLEMENTATION				REQUIRED	VERIFICATION			
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING		PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
GL-88-17 LOSS OF DECAY HEAT REMOVAL	72	70	(97 )	2	YES	72	72	66	(91 )
GL-89-13 SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	109	89	(81 )	20	YES	109	107	0	(0 )
GL-90-03 RELAXATION OF STAFF POS IN GEN LETTER 83-28, ITEM 2.2 PART 2	109	109	(100)	0	NO				
MPA-B023 DEGRADED GRID VOLTAGE	109	107	(98 )	2	NO				

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Table 4.6

#### **4.5 Conclusions**

**After detailed review of the implementation and verification status of the resolution of GSIs and sub-issues, the NRC staff has concluded the following:**

- The NRC closure process for GSIs is adequate to protect the public health and safety.**
- Licensees are making significant progress toward implementing GSI-related actions requested by the staff, and the framework exists to oversee future implementation of delayed items.**
- Significant progress has been made in verifying the completion of implementation actions associated with those GSIs that have been resolved.**
- The overall status of the 5 largely unimplemented GSIs is generally acceptable because of the relatively recent issuance of staff positions on three of the GSIs, and projected implementation schedules for the remaining 2.**

## 5 OTHER MULTIPLANT ACTIONS

This section presents the overall status of implementation and verification of other MPAs not related to TMI Action Plan requirements, USIs, or GSIs. The MPAs are applicable to the 109 licensed plants. Because each MPA may be tracked under different designations, Table 5.1 cross-references the MPA number and the SIMS number used in the tables and appendices of this report.

### 5.1 Implementation Status

Licensees achieve implementation of MPA items either by incorporating corrections into the plant design before licensing or by making the modifications necessary to meet the requested, required or voluntary actions at licensed plants. The information presented here includes all MPA items related to the 109 licensed plants considered in this report.

Approximately 87 percent of the MPA items have been implemented at licensed plants. Of the 7,517 applicable items, 6,576 have been completed and 941 remain open from an implementation standpoint. On average, each plant has less than 9 remaining items to implement. No plant has more than 12 remaining items except Browns Ferry Units 1 and 3. Each unit has 20 items. Figure 5.1 presents the overall status of, and progress on, MPAs. Of the 109 licensed plants, none have fully implemented all applicable MPAs. Table 5.2 lists the number of unimplemented MPA items by plant and projected implementation dates. Appendix D lists the unimplemented MPA items by issue and projected implementation dates. MPAs are of a dynamic nature. New MPAs can and will be added as the situation dictates during coming years.

MPAs BL-88-11, BL-92-01, BL-93-02, BL-93-03, GL-88-20, GL-89-10, GL-92-01, GL-92-08, GL-93-04, MPA-B118, and MPA-B122 account for 85 percent of the 941 unimplemented items. Figure 5.2 summarizes the implementation status of these issues. A brief description of these 11 MPAs follows:

- BL-88-11     Pressurizer Surge Line Thermal Stratification (X811)

The NRC issued IN 88-80, "Unexpected Piping Movement Attributed to Thermal Stratification," on October 7, 1988, to alert licensees of PWRs of the phenomenon. The NRC further issued BL 88-11, "Pressurizer Surge Line Thermal Stratification," on December 20, 1988, describing a series of short- and long-term actions to address the problem.

Licensees of operating PWRs were required to (1) perform a visual inspection of the surge line at the first available cold shutdown (of greater than 7 days duration) after issuance of the bulletin and (2) perform an analysis that demonstrated that the surge line met applicable design codes and other FSAR and regulatory commitments for the licensed life of the plant. If the analysis did not show

## SIMS Issue Numbers and Corresponding MPA Numbers

<b>SIMS Item No.</b>	<b>MPA No.</b>	<b>SIMS Title</b>
BL-88-08	X808	Thermal Stress in Piping
BL-88-11	X811	Thermal Stratification in PZR Surge Line (BL 88-11)
BL-92-01	X201	Thermal Lagging 330 (BL 92-01)
BL-93-02	X302	Debris Plugging of Emergency Core Cooling Suction Strainers
BL-93-03	X303	Reactor Vessel Water level Instrumentation in BWRs
GL-84-09	A019	Recombiner Capability BWR Mark I
GL-87-09	D024	Mode Changes & LCO's - Tech Specs 3.0.4 and 4.0.4 (GL 87-09)
GL-88-01	B097	IGSCC Problems in BWR Piping
GL-88-11	A023	R.G. 1.99 Rev 2 (pressurized Thermal Shock Rule) (GL 88-11)
GL-88-20	B111	Individual Plant Evaluations (GL 88-20)
GL-89-01	D025	Relocate RETS to Admin Section of Tech Specs
GL-89-04	A025	IST Reviews and Schedules (GL 89-04)
GL-89-06	F072	Safety Parameter Display System - Response to GL 89-02
GL-89-10	B110	Motor Operated Valve Testing and Surveillance (GL 89-10)
GL-89-16	B112	Installation of Hardened Wetwell Vent (GL 89-16)
GL-91-08	D030	Removal of Component Lists from Tech Specs (GL 91-08)
GL-91-11	L111	Vital Instruments Buses and Tie Breakers (GL-48,49)
GL-92-01	B120	Reactor Vessel Structural Integrity
GL-92-04	B121	BWR Water Level Instrumentation
GL-92-08	L208	Thermo-Lag 330-1 Fire Barriers
GL-93-04	L304	Rod Control System Failure and Withdrawal of Rod Control Cluster Assemblies
MPA-B116	B116	Consider Results of Sponsored Motor-operated Tests (GL 89-10, Supp 3)
MPA-B117	B117	Failure of Westinghouse SG Tube Mechanical Plugs (BL 90-01, Supp 2)
MPA-B118	B118	IPE External Events (GL 88-20, Supp 4)
MPA-B122	B122	Loss of Fill-Oil in Transmitters Manufactured by Rosemount (BL-90-01)

**Table 5.1**

**Summary of Unimplemented MPA Items by Plant**

<b>PLANT</b>	<b>Items Remaining</b>	<b>PLANT</b>	<b>Items Remaining</b>	<b>PLANT</b>	<b>Items Remaining</b>
Arkansas 1	8	Ginna	12	Pilgrim 1	7
Arkansas 2	8	Grand Gulf 1	8	Point Beach 1	9
Beaver Valley 1	10	Haddam Neck	6	Point Beach 2	9
Beaver Valley 2	10	Harris 1	9	Prairie Island 1	9
Big Rock Point 1	6	Hatch 1	12	Prairie Island 2	9
Braidwood 1	11	Hatch 2	12	Quad Cities 1	9
Braidwood 2	12	Hope Creek 1	7	Quad Cities 2	9
Browns Ferry 1	20	Indian Pt 2	8	River Bend 1	7
Browns Ferry 2	10	Indian Pt 3	6	Robinson 2	8
Browns Ferry 3	20	Kewaunee	8	Salem 1	10
Brunswick 1	9	LaSalle 1	11	Salem 2	9
Brunswick 2	9	LaSalle 2	12	San Onofre 2	10
Byron 1	11	Limerick 1	8	San Onofre 3	11
Byron 2	11	Limerick 2	9	Seabrook 1	5
Callaway 1	10	Maine Yankee	7	Sequoyah 1	7
Calvert Cliffs 1	5	McGuire 1	9	Sequoyah 2	8
Calvert Cliffs 2	6	McGuire 2	9	South Texas 1	8
Catawba 1	7	Millstone 1	8	South Texas 2	7
Catawba 2	7	Millstone 2	6	St. Lucie 1	7
Clinton 1	8	Millstone 3	7	St. Lucie 2	7
Comanche Peak 1	8	Monticello	6	Summer 1	7
Comanche Peak 2	3	Nine Mile Pt 1	10	Surry 1	8
Cook 1	11	Nine Mile Pt 2	8	Surry 2	8
Cook 2	9	North Anna 1	9	Susquehanna 1	11
Cooper Station	7	North Anna 2	9	Susquehanna 2	11
Crystal River 3	8	Oconee 1	7	Three Mile Island 1	8
Davis-Besse 1	8	Oconee 2	7	Turkey Pt 3	7
Diablo Canyon 1	6	Oconee 3	7	Turkey Pt 4	6
Diablo Canyon 2	6	Oyster Creek 1	8	Vermont Yankee 1	12
Dresden 2	8	Palisades	9	Vogtle 1	9
Dresden 3	8	Palo Verde 1	11	Vogtle 2	9
Duane Arnold	7	Palo Verde 2	10	Washington Nuclear 2	8
Farley 1	8	Palo Verde 3	11	Waterford 3	8
Farley 2	8	Peach Bottom 2	10	Wolf Creek 1	8
Fermi 2	9	Peach Bottom 3	11	Zion 1	8
Fitzpatrick	5	Perry 1	11	Zion 2	8
Ft Calhoun 1	5				

Table 5.2

## Other MPA Issues Implementation Status at Licensed Plants

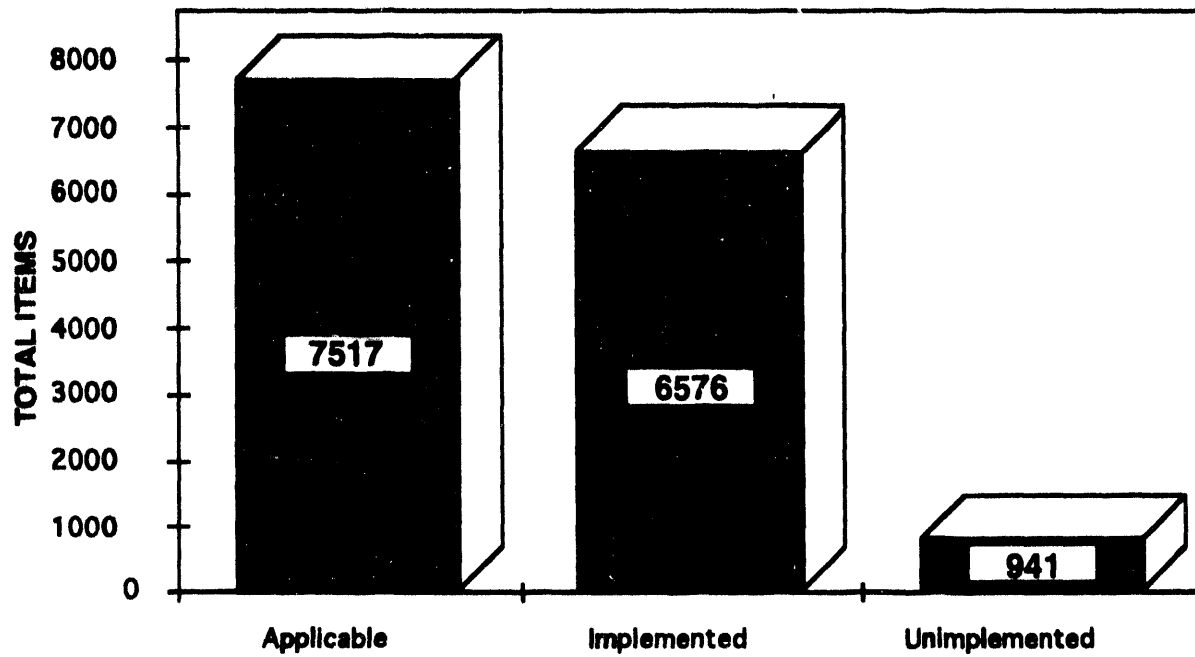
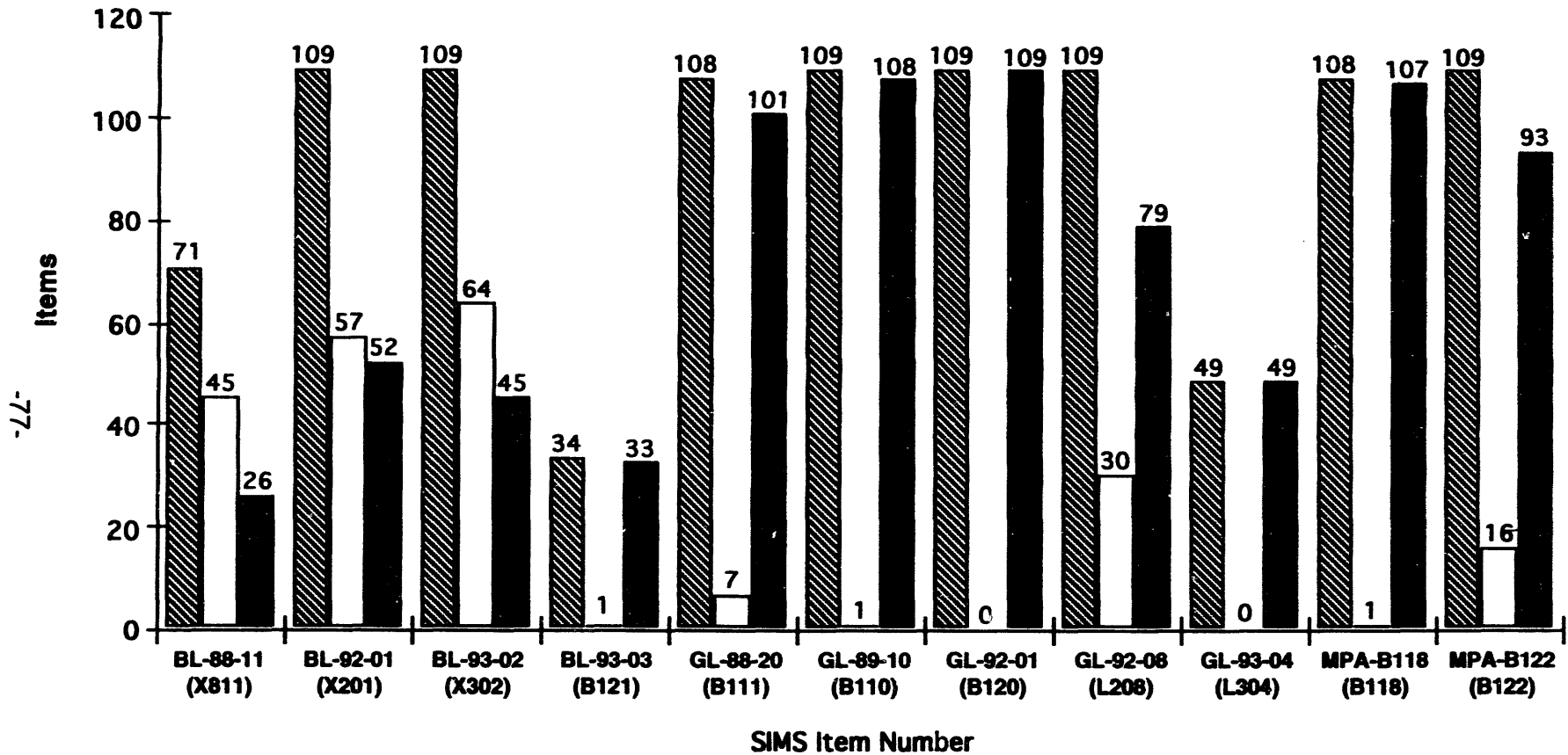


Figure 5.1



## Summary of Eleven Unimplemented MPAs



### Legend

- ▨ Applicable Plants
- Implemented Plants
- Unimplemented Plants

Figure 5.2

compliance with the applicable codes, licensees were required to obtain plant specific data on thermal stratification, striping and line deflection.

Most PWR licensees coordinated their efforts through their respective owners groups. For Westinghouse plants, the issue is closed for all except six units. These six units require minor modifications that will ensure surge line stresses remain acceptable for the design life of the plant.

The staff resolved open items regarding the CE Owners Group analysis and issued a Safety Evaluation in June 1993. The staff also resolved open items regarding the B&W Owners Group analysis and issued a Safety Evaluation in September 1993. CE and B&W licensees must confirm the applicability of the respective owners group analysis to their plants.

- **BL-92-01**     Failure of Thermo-Lag 330 Fire Barrier System (X201)

On June 24, 1992, the NRC issued BL 92-01, "Failure of Thermo-Lag 330 Fire Barrier System to Maintain Cabling in Wide Cable Trays and Small Conduits Free From Fire Damage."

TU Electric and the NRC sponsored additional testing of Thermo-Lag 330 materials. As a result of failures in these tests, BL 92-01, Supplement 1, was issued on August 28, 1992, to extend the scope of the original bulletin by requesting licensees to (1) identify the areas of the plant that use this material for protection and separation of safe shutdown capability, (2) implement appropriate compensatory measures for an inoperable barrier, and (3) verify that the requested actions have been taken and describe the measures being taken to ensure operability.

The responses to BL 92-01 indicate that 83 operating plants have Thermo-Lag fire barrier material installed and appropriate compensatory measures have been implemented. The staff is reviewing responses to Supplement 1 as they are received. An action plan has been developed to address the concerns identified by the special review team.

- **BL-93-02**     Debris Plugging of Emergency Core Cooling Suction Strainers (X302)

This issue arose when a recent experience demonstrated that the capability of the emergency core cooling system (ECCS) to perform its intended function is less than expected. While Perry 1 was shut down in January 1993, the licensee discovered that two ECCS strainers were clogged with particulates and deformed by hydraulic forces. After taking corrective action, and while testing the strainers, the licensee discovered that a strainer was again clogged. Fiberglass from air filters in the drywell and iron corrosion products were clogging the strainers. The strainers clogged with fibrous material act as filters; progressively they filter out finer material and develop larger pressure drops than previously anticipated.

Clogging of the strainers can lead to loss of net positive suction head (NPSH), cavitation of the ECCS pumps, and loss of the ECCS. Failure of the ECCS to perform its intended function can cause failure of fuel cladding and the containment and a release of radiounuclides to the environment.

On May 11, 1993, the NRC issued NRC Bulletin 93-02, "Debris Plugging of Emergency Core Cooling Suction Strainers." The bulletin discussed several instances in which ECCS suction was blocked because fibrous material plugged the strainer. All operating reactor licensees were requested to identify all bus air filters or other temporary sources of fibrous material, not designed to withstand a LOCA, that are installed or stored in the primary containment, take prompt action to remove any such material, and take any immediate compensatory measure that may be required to ensure the functional capability of the ECCS. Licensees were required to provide a written response stating if the actions requested have been or will be performed, the locations and quantity of any identified material, and any immediate compensatory measures taken. Reports on the completion of the requested actions and justification for any deviations from the requested actions also were required.

The responses to BL 93-02 indicate that approximately 75 percent of the licensees do not need, or had already performed, any necessary corrective actions. For the remainder of the licensees whose responses did not provide sufficient information or who took exception to the actions requested in the bulletin, the staff will review further. The issue should be resolved for all facilities within 1 year of the date of the bulletin.

- BL-93-03/GL-92-04 Reactor Vessel Water Level Instrumentation in BWRs (B121/X303)

The staff issued GL 92-04, "Resolution on the Issues Related to Reactor Vessel Water Level Instrumentation in BWRs Pursuant to 10 CFR 50.54(f)" on August 19, 1992, to alert licensees of BWRs to errors related to instrumentation accuracy in water level instrumentation and to the results of the staff's review of the BWROG's generic analysis of these errors. The staff also requested addressees to (1) determine the impact of these errors on automatic safety system response, operator short- and long-term actions, and emergency operating procedures at their facilities; (2) take short- and long-term corrective actions; and (3) submit a report that includes the results of their determinations, a discussion of their short- and long-term actions, and the schedule for completion of their long-term programs.

All addressees responded by September 28, 1992. Most licensees requested deferral of the long-term corrective actions to allow BWROG to complete testing and analysis of the BWR water level instrumentation. The staff accepted delays in the implementation of long-term corrective actions pending BWROG development of plant and/or procedure modifications by July 1993.

Following an event at the WNP-2 plant in January 1993, additional analyses by the BWROG revealed additional safety concerns related to RPV water level instrumentation at low pressures following normal depressurizations. This led the staff to issue NRC Bulletin 93-03 on May 28, 1993, requesting additional actions by the addressees. These actions were to (1) provide additional procedures and training to address the new concerns and (2) implement, at the first cold shutdown after July 30, 1993, hardware modifications to ensure high functional reliability of the RPV water level instrumentation for long-term operation. Addressees have provided their responses, and the NRC is reassessing implementation schedules based on preventing undue hardship or adverse consequences.

Temporary Instruction 2515/119 was issued on March 31, 1993, to verify licensee implementation of operator guidance and training to ensure required operator actions concerning reactor water level following rapid depressurization transients.

- GL-88-20     Individual Plant Examination for Severe Accident Vulnerability  
                  10 CFR 50.54(F) (B111)

The NRC issued GL 88-20, "Individual Plant Examination for Severe Accident Vulnerability," on November 23, 1988 to request addressees to perform an individual plant examination (IPE) of their plant-specific internal event severe accidents and report the results of their analysis.

The NRC issued Supplement 1 to GL 88-20, "Initiation of the Individual Plant Examination for Severe Accident Vulnerabilities - 10 CFR 50.54," on August 29, 1989 requiring licensees to submit an IPE to identify plant-specific severe accident vulnerabilities using probabilistic risk analysis methodology.

The IPE effort is more complex than estimated. Licensees have delayed submittal of several IPEs from 2 to 18 months. The staff has issued seven evaluation reports documenting the results of the Step 1 review for Seabrook, Turkey Point 3/4, Oconee 1 2/3, Surry 1/2, Beaver Valley 2, Diablo Canyon 1/2, and Millstone 3 IPEs. The following three plants have been selected to date for Step 2 IPE reviews: Turkey Point 3 and 4 and Fitzpatrick.

With the exception of Browns Ferry 1 and 3 (which are shutdown), all IPE reports are scheduled for submittal by June 1994, the scheduled date for Braidwood 1 and 2. Staff closure is estimated to occur by the end of 1995.

- GL-89-10     Safety Related Motor-Operated Valve Testing and Surveillance (B110)

NRC staff issued GL 89-10 to inform licensees of problems concerning the operability of safety-related motor-operated valves, and request addressees to (1) establish programs to demonstrate the operability of these valves and to ensure continued operability over the life of the plant, (2) provide a commitment to establish such a program and complete the demonstration of operability within the

timeframe specified in GL 89-10, and (3) report completion of the demonstration phase of their programs. The subject matter of this generic letter is related to that of BL 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transient Due to Improper Switch Setting," and its supplements.

Supplements 1 through 4 of GL 89-10 were addressed in Supplement 2 of NUREG 1435. Since then, Supplement 5, "Inaccuracy of Motor-Operated Valve Diagnostic Equipment," was issued on June 28, 1993, to request licensees to reexamine their MOV programs in light of new information on MOV diagnostic equipment inaccuracies and to identify measures taken or planned to account for uncertainties in valve thrust. Licensees are also to determine the schedule necessary to satisfy this supplement.

- **GL-92-01     Reactor Vessel Structural Integrity (B120)**

NRC issued GL 92-01, "Reactor Vessel Structural Integrity," on February 28, 1992. Revision 1 was issued on March 6, 1992. The background section concerning NRC's assessment of embrittlement in the Yankee Rowe reactor vessel was updated by Revision 1 to better reflect the licensee's extensive technical efforts regarding reactor vessel integrity. The information was requested within 120 days from issuance of GL 92-01, Revision 1. All licensees have responded.

GL 92-01 is part of the staff's continuing program to evaluate reactor vessel integrity. The information provided will be issued to confirm that all licensees are complying with the requirements of 10 CFR 50.60 and 50.61 and Appendices G and H to 10 CFR Part 50 and are fulfilling the requirements of GL 88-11, "NRC Position On Radiation Embrittlement of Reactor Vessel Materials and Its Impact On Plant Operations."

A status paper (SECY-93-048) dated February 25, 1993, provided the results of the staff's initial screening of GL 92-01. Many requests for additional information have been issued to resolve discrepancies or inconsistencies in the licensees responses. All issues related to the methodology used to determine compliance with Appendix G to 10 CFR Part 50 will be resolved or the review and approval of equivalent margin analysis, as requested by licensees, will be performed. The staff also is reviewing the current values of reactor vessel material brittle-to-ductile transition temperature because of the information provided in response to the generic letter. An expanded reactor vessel materials data base is being developed on the basis of the detailed information provided in responses to the generic letter.

- **GL-92-08     Thermo-Lag 330-1 Fire Barriers (L208)**

On August 6, 1991, the NRC issued IN 91-47, "Failure of Thermo-Lag Fire Barrier Material to Pass Fire Endurance Test," which contained information on the fire endurance test performed by the Gulf State Utilities Company on Thermo-Lag 330 fire barrier system installed on wide aluminum cable trays and the associated

failures. On December 6, 1991, the NRC issued IN 91-79, "Deficiencies in The Procedures for Installing Thermo-Lag Fire Barrier Materials," which contained information on deficiencies in procedures that the vendor (Thermal Science, Inc.) supplied for installing Thermo-Lag Fire Barrier Material. Recognizing the concerns stated in INs 91-47 and 91-79 regarding the Thermo-Lag 330 fire barrier system, Texas Utilities (TU) Electric instituted a full-scale fire endurance testing program to qualify its Thermo-Lag 330 electrical raceway fire barrier systems for its Comanche Peak Steam Electric Station. The results of these tests have raised questions regarding the ability of the Thermo-Lag 330 fire barrier system to perform its specified function as a 1-hour fire barrier.

On June 23, 1992, the NRC issued IN 92-46, "Thermo-Lag Fire Barrier Material Special Review Team Final Report Findings, Current Fire Endurance Testing, and Ampacity Calculation Errors," in which it discussed the safety implications of these questions. On June 24, 1992, the NRC issued BL 92-01, "Failure of Thermo-Lag 330 Fire Barrier System To Maintain Cabling in Wide Cable Trays and Small Conduits Free From Fire Damage." TU Electric and the NRC sponsored additional testing of Thermo-Lag 330 materials. As a result of failures in these tests, BL 92-01, Supplement 1, was issued on August 28, 1992, to extend the scope of the original bulletin.

Following this action, on December 17, 1992, the NRC issued GL 92-08, which required the licensees to confirm (1) that the Thermo-Lag 330-1 barrier systems have been qualified by representative fire endurance tests, (2) that the ampacity derating factors have been derived by valid tests, and (3) that these qualified barriers have been installed with appropriate procedures and quality controls to ensure that they comply with the NRC's requirements.

In response to GL 92-08, most licensees have indicated that they await the results of the NUMARC tests of Thermo-Lag 330 fire barrier material. The NUMARC tests are scheduled to be completed in January 1994, at which time, licensees will develop their plan of action for the resolution of the Thermo-Lag 330 issue.

- GL-93-04     Rod Control System Failure and Withdrawal of Rod Control Cluster Assemblies. 10 CFR 50.54(f) (L304)

The NRC issued GL 93-04 on June 21, 1993, (1) to notify addressees about a single failure vulnerability within the Westinghouse solid-state rod control system that could cause an inadvertent withdrawal of control rods in a sequence resulting in a power distribution not considered in the design basis analyses and (2) to require that all action addressees provide the NRC with information describing their plant-specific findings related to this issue and actions taken. The GL was addressed to all holders of operating licenses or construction permits for Westinghouse-designed nuclear power reactors except Haddam Neck.

The GL requested licensees to assess within 45 days if their licensing basis is still satisfied with regard to single failure in the rod control system in light of the Salem event. If the licensing basis is not satisfied, the NRC requested licensees to provide an assessment of the impact and describe any compensatory short-term actions taken within 45 days and provide a plan and schedule for long-term resolution within 90 days. On July 26, 1993, the NRC granted relief to the schedules to extend the licensing basis assessment portion of the 45-day response to the 90-day response, in response to a request from the Westinghouse Owners Group.

All licensees have provided their 45-day response and these are under NRC staff review. The 90-day responses were due by September 19, 1993 and the staff is reviewing these responses.

- **MPA-B118 IPE External Events (GL-88-20, Supp 4) (B118)**

The staff issued Supplement 4 to GL 88-20 on June 28, 1991 to initiate the IPE process for external events. Five categories of external events were specified and licensees were required to submit to a schedule and methodology by December 26, 1991. Licensees were requested to submit the results of the individual plant examination of external events (IPEEE) within 3 years of the issuance date of Supplement 4, or no later than June 28, 1994. A copy of NUREG-1407, "Procedural and Submittal Guidance for the IPEEE for Severe Accident Vulnerabilities," was sent to each licensee with Supplement 4. All licensee responses to Supplement 4 with respect to schedules and methodology, have been received and reviewed independently and jointly by NRR and RES.

Supplement 1 to GL 87-02 was issued on May 22, 1992, approving the seismic qualification utility group generic implementational procedure for USI A-46 implementation and starting the clock for both A-46 and the IPEEE. Following review of the licensees' responses to Supplement 4 to GL 88-20 (IPEEE), the NRC staff met to develop guidelines that would be used in determining whether a licensee's response would be considered acceptable. The NRC staff reported the results to the commission (SECY-92-130), and estimated a delay of approximately 1 year may be warranted. The guidelines reported to the Commission were that the IPEEE results must be submitted to the staff by June 1995 or within 3 years after issuance of the staff's evaluation approving the A-46 GIP, whichever occurs first. Therefore, since the evaluation was issued on May 22, 1992 with GL 87-02, Supplement 1, licensees were advised that the latest acceptable date for IPEEE submittal would be June 1995. A second round of licensee responses indicated that by the best effort by the industry will have the IPEEEs for 72 plants submitted by the target date of June 1995 but for the remaining 38 plants, the submittal dates will range from September 1995 to July 1997.

There are a small number of plants that have unique problems requiring a more customized response (1) because the licensee proposed alternative methods or

failed to provide any method at all for its IPEEE or (2) because the licensee's plant was one of the eight singled out by the Eastern United States Seismic Hazards Program as needing further NRC staff evaluation.

- **MPA-B122 Loss of Fill-Oil in Transmitters Manufactured by Rosemount (BL-90-01) (B122)**

On April 21, 1989, the staff issued Information Notice 89-42, "Failure of Rosemount Models 1153 and 1154 Transmitters," to alert the industry of the loss of oil-fill problem. On March 9, 1990, the staff issued Bulletin 90-01, "Loss of Fill-Oil in Transmitters Manufactured by Rosemount," to request the licensees to promptly identify and to take appropriate corrective action for Model 1153, Series B, Model 1153, Series D, and Model 1154 transmitters that may have the potential for leaking fill-oil. From mid 1990 through 1992, the staff reviewed information from the (1) licensee responses to Bulletin 90-01, (2) data from related licensee event reports, (3) visits to the sites, (4) NUMARC Report 91-02, "Summary Report of NUMAC Activities to Address Oil Loss in Rosemount Transmitters," and (5) meetings with the industry. The staff found a relationship between operating pressure and time-in-service that can be trended for use in identifying transmitters that are most likely to fail. The staff has concluded that (1) the requested actions in Bulletin 90-01 were insufficient in that they did not provide the desired high functional reliability and (2) a supplemental bulletin would be needed for ensuring appropriate licensee corrective action to the loss of fill-oil problem.

Subsequently, on December 22, 1992, the staff issued Bulletin 90-01, Supplement 1, "Loss of Fill-Oil in Transmitters Manufactured by Rosemount," to request new action from the licensees. Specifically, licensees were to provide information on specified models of the Rosemount transmitters manufactured before July 11, 1989, that are in use or may be used in the future. The information shall detail the use of the devices in either a safety-related system or a system governed by the NRC's ATWS (anticipated transient without scram) requirements where normal operating pressure is greater than 500 pounds per square inch. Requested corrective action includes the replacement of the suspect transmitter or the use of an enhanced surveillance monitoring program until the transmitter reaches the time-in-service pressure criterion recommended by the vendor.

Responses to the supplemental bulletin have been received from all applicable licensees and currently are under the staff review.

A brief description of other multiplant actions with more than three open items follows:



- **BL-88-08     Thermal Stress in Piping Connected to RCS (X808)**

Following a circumferential crack in an unisolable section of emergency core cooling piping at Farley 2, the NRC issued BL 88-08, "Thermal Stresses in Piping Connected to Reactor Coolant Systems," dated June 22, 1988. The Bulletin requested all licensees and applicants to take the following three actions: (1) review their reactor coolant systems (RCSs) to identify any connected unisolable piping that could be subjected to temperature distributions that could result in unacceptable thermal stresses, (2) examine unisolable piping sections for existing flaws, and (3) implement a program to provide continuing assurance that unisolable sections will not be subject to stresses that could cause fatigue failure.

In summary, BL 88-08 was closed for those BWRs and PWRs whose responses to action item 3 above were consistent with the stated modification or monitoring alternatives. However, some plants replied that assurance for certain lines would be provided by inspection alone, when conducted as part of their inservice inspection program. The licensee responses for these plants were unacceptable without further justification, because inservice inspection was not identified by BL 88-08 as an acceptable alternative. The basis for this position is that the fundamental precept of the actions of BL 88-08 is to prevent the initiation of cracks in piping. Inservice inspection is not a technique that prevents the initiation of cracks. Rather, inservice inspection identifies cracks after they appear, and then a safety significance determination is made and corrective action is proposed. The staff is reviewing the supplemental responses of licensees whose initial submittals contained insufficient information.

- **GL-84-09     Recombiner Capability Requirements of 10 CFR 50.44 (C)(3)(II) (A019)**

As a result of the TMI-2 accident, it became clear that the amount of hydrogen produced from the metal-water reaction was far in excess of that previously considered by the NRC staff during the licensing process. As a result, the staff revised 10 CFR 50.44, "Standards for Combustible Gas Control Systems," effective January 4, 1982 (46 FR 58484) to address this safety concern. For plants with Mark I and Mark II type containments, the staff determined that containment inerting (with nitrogen) and recombiner capability were sufficient measures to accommodate hydrogen from a 75-percent metal-water reaction without resulting in a burnable mixture. Certain licensees with Mark I containment took exception to the staff's position of providing recombiner capability because they believed the assumptions in NEDO-22155 were questionable. Therefore, using the models in NEDO-22155, they calculated that a typical Mark I design equipped with containment inerting was sufficient to preclude a burnable mixture resulting from a 75 percent metal-water reaction for the 30 days following an accident, both within the design-basis-accident (DBA) envelop and slightly beyond. The NRC staff concluded that, on balance, costs outweighed the benefits to address this limited situation. To reflect this position, the NRC issued GL 84-09, dated May 8, 1984.

GL 84-09 allowed licensees with Mark I type containments that rely on purge/repressurization systems as a means of hydrogen control, an option in lieu of installing recombiner capability if they met the following conditions: (1) the plant has technical specifications (limiting conditions for operation) requiring that the containment is less than 4-percent oxygen while inerted, (2) the plant has only nitrogen or recycled containment atmosphere for use in all pneumatic control systems within containment, and (3) there are no significant sources of oxygen in containment other than that resulting from radiolysis of the reactor coolant.

- GL-87-09 Sections 3.0 and 4.0 of the Standard Technical Specifications on the Applicability of Limiting Conditions for Operation and Surveillance Requirements (D024)

The NRC issued GL 87-09 on May 4, 1987, to provide guidance for three specific problems that had been encountered with the general requirements on the applicability of limiting conditions for operation (LCOs) and surveillance requirements in Section 3.0 and 4.0 of the Standard Technical Specifications. The problems involve (1) unnecessary restrictions on mode changes and inconsistent application of exceptions, (2) unnecessary shutdowns when surveillance intervals are inadvertently exceeded, and (3) possible conflicts between Specification 4.0.3 and 4.0.4. Staff guidance addressed these problems. Implementation of the guidance contained in GL 87-09 is voluntary.

- GL-88-01 NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping (B097)

The NRC issued GL 88-01, "NRC Position on IGSCC In BWR Austenitic Stainless Steel Piping," on January 25, 1988, to seek information from BWR licensees and construction permit holders regarding implementation of new staff positions regarding intergranular stress corrosion cracking (IGSCC). Addressees were asked to respond within 120 days of receipt of GL 88-01. The response was to indicate whether the utility intended to follow the staff positions included in the letter or propose alternative measures. An acceptable response from licensees also included a commitment to revise technical specifications (TS) to be consistent with the NRC staff positions in GL 88-01.

GL 88-01, Supplement 1, was issued on February 4, 1992. The supplement provided clarification, guidance, and acceptable alternative staff positions to the positions delineated in GL 88-01. The supplement did not require a response.

- GL-88-11 NRC Position on Radiation Embrittlement of Reactor Vessel Materials (A023)

Revision 2 to RG 1.99, "Radiation Embrittlement of Reactor Vessel Materials," became effective in May 1988. GL 88-11 was issued on July 12, 1988, and

indicated that RG 1.99 (Rev. 2) would be used by the staff for evaluating all submittals regarding pressure-temperature limits and for all analyses that require an estimate of vessel beltline embrittlement (except those for pressurized thermal shock).

GL 88-11 requested that all licensees of operating reactors use the methods described in Revision 2 to RG 1.99 to predict the effect of neutron radiation on reactor vessel materials as required by Appendix G to 10 CFR Part 50, unless they could justify the use of different methods. The licensees were required to submit the results of their analyses and an implementation plan for proposed actions. Acceptable responses have been received from all licensees and all technical reviews have been completed.

- GL-89-01 Implementation of Program Controls for RETS in Administration Control Section (D025)

The NRC issued GL 89-01 on January 31, 1989 to provide guidance for the implementation of programmatic controls for radiological effluent technical specifications (RETS) in the administrative controls section of TS and the relocation of procedural details of current RETS to the offsite dose calculation manual (ODCM) or process control program (PCP). It is not the staff's intent to reduce the level of radiological effluent control. Rather, this proposed TS change will provide programmatic controls for RETS consistent with regulatory requirements and allow relocation of the procedural details of current RETS to the ODCM or PCP. Implementation of the guidance contained in GL 88-11 is voluntary.

- GL-89-04 IST Reviews and Schedules (A025)

The staff noted that certain generic weaknesses were being observed in licensee inservice testing (IST) programs. The NRC issued GL 89-04, "Guidance on Developing Acceptable Inservice Testing Programs," on April 3, 1989. With the exception of certain plants noted in the generic letter, licensees of the remaining plants were required to (1) review their most recently submitted IST program and procedures against the positions of GL 89-04 and (2) confirm in writing within 6 months their conformance with the staff positions. These licenses also were required to submit a schedule for equipment and program modifications required as a result of the review. GL 89-04 granted approval for licensees to change their IST program without specific prior approval for changes that conformed to the staff positions.

In response to GL 89-04, many facilities revised their programs to reflect the relief granted by the staff positions in GL 89-04. In many cases, the facilities submitted revised programs, including additional relief requests that were outside the scope of the generic letter. The staff has completed individual evaluations for such plants. These facilities must confirm correction of any program anomalies identified in the staff's safety evaluation.

Temporary Instruction 2515/114 was issued on January 15, 1992, to provide uniform guidance for inspecting the activities of nuclear power plant licensees regarding inservice testing of pumps and valves.

- **GL-89-06     Task Action Plan Item I.D.2 - SPDS (F072)**

The NRC issued NUREG-0737 on October 31, 1980 to provide guidance for implementing TMI action items. On December 17, 1982, GL 82-33 transmitted Supplement 1 to NUREG-0737 to clarify the TMI action items related to emergency response capability, including item I.D.2, safety parameter display system (SPDS). The staff evaluated licensee/applicant implementation of the SPDS requirements at 57 units and found that a large percentage of designs did not fulfill the requirements identified in Supplement 1 to NUREG-0737.

The NRC staff issued GL 89-06 on April 12, 1989 to provide information to licensees regarding the implementation status of the SPDS at their facilities. NUREG-1342 was enclosed with GL 89-06 to aid in implementing the SPDS requirements. Licensees were required to furnish one of the following: (1) certification that the SPDS fully meets the requirements of NUREG-0737, Supplement 1, taking into account the information provided in NUREG-1342; (2) certification that the SPDS will be modified to fully meet the requirements of NUREG-0737, Supplement 1, taking into account the information provided in NUREG-1342; or (3) if a certification cannot be provided, the licensee must provide a discussion of the reasons for that finding and a discussion of the compensatory action the licensee intends to take or has taken.

- **GL-89-16     Installation of Hardened Wetwell Vent (B112)**

The Mark I containment performance improvement (CPI) program identified a number of plant modifications that substantially enhance a plant's capability to both prevent and mitigate the consequences of severe accidents. The improvements that were recommended to the Commission included (1) improved hardened wetwell vent capability, (2) improved reactor pressure vessel depressurization system reliability, (3) an alternative water supply to the reactor vessel and drywell sprays, and (4) updated emergency procedures and training.

In a staff requirements memorandum (SRM) of July 11, 1989, the Commission directed the staff to (1) proceed with a generic implementation of installation of hardened wetwell vents at all Mark I containment plants; (2) forward the remaining CPI improvement requirements to the licensees of the Mark I containment plants for incorporation into their individual plant examination (IPE) programs; and (3) expedite the staff actions to implement the station blackout rule at the Mark I containment plants. The staff issued GL 89-16 to address generic implementation of hardened wetwell vent installation.

The licensees responded to GL 89-16 through the Boiling Water Reactor Owners Group (BWROG). The staff has completed the evaluation of the licensees' actions implementing the hardened vent capability at all 24 Mark I plants and has either approved the modification schedules or accepted the existing wetwell venting capability. The staff is currently preparing a TI for verification of hardened vent installation.

- **GL-91-11 Vital Instrument Buses and Tie Breakers (GI-48 & 49) (L111)**

GL 91-11 required all licensees to certify that plant procedures included time limitations and surveillance requirements for vital instrument buses, inverters or other onsite power sources to the vital instrument buses, and tie breakers that can connect redundant Class 1E buses between units at the same site. If plant procedures did not include time limitations and surveillance requirements as requested, a documented evaluation was needed to justify why such provisions were not needed.

- **MPA-B116 Results of NRC Testing of MOVs (GL-89-10, Supp 3) (B116)**

On June 5, 1990, the staff issued IN 90-40, "Results of NRC-Sponsored Testing of Motor-Operated Valves (MOV)." The tests revealed that the valves required more thrust for opening and closing under various differential pressure and flow conditions than would have been predicted from standard industry calculations using typical friction factors. Therefore, the staff issued Supplement 3 to GL 89-10 on October 25, 1990, which described required actions for licensees of BWRs. Licensees were required to provide (1) criteria reflecting operating experience and the latest test data that were applied in determining whether the deficiencies exist in the subject MOVs, (2) a list of the MOVs found to have deficiencies, and (3) a schedule for the necessary corrective action.

- **MPA-B117 Failure of Westinghouse SG Tube Mechanical Plugs (B117)**

Bulletin 89-01, Supplement 2, requested that actions similar to those requested in NRC Bulletin 89-01, "Failure of Westinghouse Steam Generator Tube Mechanical Plugs," be extended to include all Westinghouse mechanical plugs fabricated from thermally treated Inconel 600.

Bulletin 89-01, requested that licensees determine whether certain mechanical plugs supplied by Westinghouse were installed in the steam generator (SG) and, if so, that an action plan (including plug repair and/or replacement) be implemented to ensure that the plugs would continue to provide adequate assurance of reactor coolant pressure boundary (RCPB). The request applied to only four plugs fabricated from Inconel heats and referred to as group 1 heats. These plugs were highly susceptible to primary water stress, corrosion cracking (PWSCC).

After issuance of Bulletin 89-01, Westinghouse compiled a complete listing of all Inconel 600 plug lifetime categorized by plant, date of installation, and heat number. All plugs, not included in group 1 heats were specified as group 2 heats.

During the summer and autumn of 1990, two plants experienced PWSCC affecting group 2 heats. These events were described in Bulletin 89-01, Supplement 1. Subsequently, Westinghouse revised its algorithm for estimating plug lifetimes PWSCC rather than temperature relationship, on the basis of operating experience trends.

Cumulated field experience prompted issuance of Bulletin 89-01, Supplement 2 on June 28, 1991, which requested that actions similar to those requested in BL 89-01, be extended to include all Westinghouse mechanical plugs group 2 heats fabricated from thermally treated Inconel 600. These actions were measured to ensure that the mechanical plugs would continue to provide adequate assurance of RCPB integrity under normal operating, transient, and postulated conditions.

## 5.2 Verification Status

For generic items such as MPAs, NRR issues TIs for those items that need to be verified in the field by the NRC staff after licensees have implemented the corrective actions specified in the MPA resolution. The NRC performs these inspections, consistent with other inspection priorities, to verify proper implementation of the requirements. Verification is not considered complete until the required inspection is conducted in accordance with the TI, and an inspection report has been issued documenting that requirements have been adequately satisfied by the licensee. On occasion, there may be issues for which the requirements specified in the TI for safety verification inspection are completed before total implementation of all aspects of the issue's resolution by the licensee.

TIs provide guidance for the field verification of licensee implementation of other MPAs. The NRC issued 15 TIs for 15 individual MPA issues, which cover a total of 879 items at the 109 licensed plants. Upon initial inspection of certain items and further review by the regional offices, 103 items covered by the TIs were found to be inapplicable from a verification standpoint, leaving a total of 776 items requiring verification. The majority of items found not applicable are cases in which initial inspection did not reveal any significant findings and for which further inspection effort cannot be justified. As of September 30, 1993, 589 items (76 percent) had been verified. TI designations and the corresponding MPAs are summarized in Table 5.3. Table 5.4 summarizes the items remaining to be verified.

## Temporary Instructions for Resolved MPAs

<u>SIMS Item</u>	<u>MPA</u>	<u>SIMS Title</u>	<u>TI Number</u>
BL-79-15	B031	Deep Draft Pump Deficiencies	2500/001
BL-80-11	B059	Masonry Wall Design	2515/037
BL-88-04	X804	SI Pump Failure (Bulletin 88-04) (Old MPA B103)	2515/105
BL-88-07	X807	Power Oscillations in Boiling Water Reactors (BWRs)	2515/099
GL-80-002	A015	Quality Assurance Requirements Regarding Diesel Generator Fuel Oil	2515/093
GL-81-21	B066	Natural Circulation Cooldown	2515/086
GL-83-08	D021	Modification of Vacuum Breakers on Mark I Containments	2515/096
GL-89-04	A025	Guidance on Accepting Inservice Testing Programs	2515/114
GL-89-07	L907	Power Reactor Safeguards Contingency Planning for Surface Vehicle Bombs	2515/102
GL-89-10	B110	Safety Related Motor Operated Valve Testing and Surveillance	2515/109
GL-92-04	X303	Reactor Vessel Water Level Instrumentation in BWRs	2515/119
MPA-B003	B003	PWR Moderator Dilution	2515/094
MPA-B011	B011	Flood of Equipment Important to Safety	2515/088
MPA-B041	B041	Fire Protection - Final Technical Specification (Including SER Supplements)	2515/062
MPA-C002	C002	BWR Recirculation Pump Trip (ATWS)	2515/095

**Table 5.3**

## Summary of Other MPA Items Requiring Verification

<u>SIMS Item</u>	<u>Plants Covered</u>	<u>Plants Required</u>	<u>Plants Verified</u>
BL-88-07 POWER OSCILLATIONS IN BOILING WATER REACTORS (BWRs)	37	37	36
GL-81-21 NATURAL CIRCULATION COOLDOWN	72	67	60
GL-83-08 MODIFICATION OF VACUUM BREAKERS ON MARK I CONTAINMENTS	23	23	21
GL-89-04 GUIDANCE ON ACCEPTABLE INSERVICE TESTING PROGRAMS	40	38	3
GL-92-04 REACTOR VESSEL WATER LEVEL INSTRUMENTATION IN BWRs	37	37	0
GL-89-10 SAFETY-RELATED MOTOR-OPERATED VALVE TESTING AND SURVEILLANCE	109	109	9
MPA-B011 FLOOD OF EQUIPMENT IMPORTANT TO SAFETY	9	3	1
MPA-B041 FIRE PROTECTION - FINAL TECH SPECS (INCLUDING SER SUPPLEMENTS)	65	62	61
MPA-C002 BWR-RECIRC. PUMP TRIP (ATWS)	21	21	19

NOTE: Plants Covered are those for which MPAs are applicable.  
 Plants Required are those plants requiring field verification.  
 Plants covered but for which field verification is not necessary have implemented the resolution in a manner not requiring plant hardware changes.

**Table 5.4**



### 5.3 Status by Plant

Table 5.5 summarizes information on the status of implementation and verification of MPAs at all licensed plants. For each plant, the table shows the total number of applicable items, the number and percentage of items implemented, and the number of items remaining to be implemented. For those MPAs that require the NRC to verify implementation actions, the table shows the number of items covered by a TI at each plant, the number of items requiring verification, and the number and percentage of items completed. Appendix D lists the unimplemented MPA items by plant and gives projected implementation dates.

Of the 109 plants, none have completely implemented all MPA items. On average, each plant less than 9 remaining items to implement. No plant has more than 12 remaining items, with the exception of Browns Ferry 1 and 3, which have 20 each.

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF OTHER MPAs - SUMMARY BY PLANT

UNIT	IMPLEMENTATION				VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS REMAINING	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
ARKANSAS 1	102	94	(92 )	8	10	8	7	(87 )
ARKANSAS 2	86	78	(90 )	8	9	7	6	(85 )
BEAVER VALLEY 1	96	86	(89 )	10	9	8	7	(87 )
BEAVER VALLEY 2	45	35	(77 )	10	7	6	4	(66 )
BIG ROCK POINT 1	70	64	(91 )	6	10	9	6	(66 )
BRAIDWOOD 1	43	32	(74 )	11	6	5	4	(79 )
BRAIDWOOD 2	41	29	(70 )	12	5	4	3	(75 )
BROWNS FERRY 1	85	65	(76 )	20	11	10	5	(50 )
BROWNS FERRY 2	80	70	(87 )	10	10	10	8	(79 )
BROWNS FERRY 3	82	62	(75 )	20	10	9	6	(66 )
BRUNSWICK 1	82	73	(89 )	9	9	9	6	(66 )
BRUNSWICK 2	82	73	(89 )	9	10	9	7	(77 )
BYRON 1	43	32	(74 )	11	5	4	3	(75 )
BYRON 2	41	30	(73 )	11	5	4	3	(75 )
CALLAWAY 1	46	36	(78 )	10	5	4	3	(75 )
CALVERT CLIFFS 1	92	87	(94 )	5	9	8	7	(87 )
CALVERT CLIFFS 2	88	82	(93 )	6	9	8	7	(87 )
CATAWBA 1	44	37	(84 )	7	5	4	2	(50 )
CATAWBA 2	43	36	(83 )	7	5	4	2	(50 )
CLINTON 1	41	33	(80 )	8	7	6	4	(66 )
COMANCHE PEAK 1	78	70	(89 )	8	9	5	4	(79 )
COMANCHE PEAK 2	73	70	(95 )	3	9	3	2	(66 )
COOK 1	91	80	(87 )	11	8	7	6	(85 )
COOK 2	90	81	(89 )	9	8	7	6	(85 )
COOPER STATION	82	75	(91 )	7	11	9	7	(77 )
CRYSTAL RIVER 3	91	83	(91 )	8	9	9	7	(77 )
DAVIS-BESSE 1	88	80	(90 )	8	9	6	5	(83 )
DIABLO CANYON 1	52	46	(88 )	6	6	6	6	(100 )
DIABLO CANYON 2	47	41	(87 )	6	5	5	5	(100 )
DRESDEN 2	83	75	(90 )	8	12	12	9	(75 )
DRESDEN 3	82	74	(90 )	8	11	11	8	(72 )
DUANE ARNOLD	87	80	(91 )	7	12	11	8	(72 )
FARLEY 1	90	82	(91 )	8	8	8	7	(87 )
FARLEY 2	56	48	(85 )	8	7	7	6	(85 )
FERMI 2	42	33	(78 )	9	7	6	4	(66 )
FITZPATRICK	83	78	(93 )	5	12	11	8	(72 )
FORT CALHOUN 1	105	100	(95 )	5	10	8	7	(87 )
GINNA	93	81	(87 )	12	10	10	8	(79 )
GRAND GULF 1	45	37	(82 )	8	7	6	4	(66 )
HADDAM NECK	92	86	(93 )	6	9	9	7	(77 )
HARRIS 1	42	33	(78 )	9	5	4	2	(50 )
HATCH 1	82	70	(85 )	12	10	9	7	(77 )
HATCH 2	77	65	(84 )	12	11	10	8	(79 )
HOPE CREEK 1	41	34	(82 )	7	6	5	3	(59 )

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Table 5.5

SAFETY ISSUE MANAGEMENT SYSTEM

STATUS OF OTHER MPAs - SUMMARY BY PLANT

UNIT	IMPLEMENTATION				VERIFICATION			
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS REMAINING	ITEMS COVERED	ITEMS REQUIRED	ITEMS COMPLETED	PER CENT COMPLETED
INDIAN POINT 2	95	87	(91 )	8	10	9	7	(77 )
INDIAN POINT 3	91	85	(93 )	6	9	8	6	(75 )
KEWAUNEE	95	87	(91 )	8	9	8	7	(87 )
LASALLE 1	40	29	(72 )	11	7	6	4	(66 )
LASALLE 2	40	28	(69 )	12	7	6	4	(66 )
LIMERICK 1	40	32	(79 )	8	6	5	3	(59 )
LIMERICK 2	38	29	(76 )	9	6	5	3	(59 )
MAINE YANKEE	96	89	(92 )	7	11	10	8	(79 )
MCGUIRE 1	53	44	(83 )	9	5	4	3	(75 )
MCGUIRE 2	47	38	(80 )	9	5	4	3	(75 )
MILLSTONE 1	76	68	(89 )	8	11	10	7	(69 )
MILLSTONE 2	93	87	(93 )	6	9	8	7	(87 )
MILLSTONE 3	42	35	(83 )	7	5	5	4	(79 )
MONTICELLO	82	76	(92 )	6	11	10	7	(69 )
NINE MILE POINT 1	85	75	(88 )	10	11	11	9	(81 )
NINE MILE POINT 2	38	30	(78 )	8	6	5	3	(59 )
NORTH ANNA 1	73	64	(87 )	9	9	9	7	(77 )
NORTH ANNA 2	56	47	(83 )	9	7	6	4	(66 )
OCONEE 1	93	86	(92 )	7	10	9	7	(77 )
OCONEE 2	93	86	(92 )	7	10	9	7	(77 )
OCONEE 3	92	85	(92 )	7	10	9	7	(77 )
OYSTER CREEK 1	79	71	(89 )	8	12	12	9	(75 )
PALISADES	95	86	(90 )	9	11	8	6	(75 )
PALO VERDE 1	40	29	(72 )	11	5	5	5	(100)
PALO VERDE 2	38	28	(73 )	10	5	5	5	(100)
PALO VERDE 3	39	26	(71 )	11	5	5	5	(100)
PEACH BOTTOM 2	81	71	(87 )	10	11	10	8	(79 )
PEACH BOTTOM 3	80	69	(86 )	11	11	10	8	(79 )
PERRY 1	33	27	(71 )	11	7	6	4	(66 )
PILGRIM 1	86	79	(91 )	7	11	10	7	(69 )
POINT BEACH 1	92	83	(90 )	9	10	9	7	(77 )
POINT BEACH 2	92	83	(90 )	9	9	8	6	(75 )
PRAIRIE ISLAND 1	94	85	(90 )	9	8	7	6	(85 )
PRAIRIE ISLAND 2	94	85	(90 )	9	8	7	6	(85 )
QUAD CITIES 1	86	77	(89 )	9	11	10	7	(69 )
QUAD CITIES 2	85	76	(89 )	9	11	10	7	(69 )
RIVER BEND 1	37	30	(81 )	7	6	5	3	(59 )
ROBINSON 2	90	82	(91 )	8	9	8	7	(87 )
SALEM 1	92	82	(89 )	10	9	9	7	(77 )
SALEM 2	57	48	(84 )	9	8	8	6	(75 )
SAN ONOFRE 2	41	31	(75 )	10	5	5	5	(100)
SAN ONOFRE 3	42	31	(73 )	11	5	5	5	(100)
SEABROOK 1	37	32	(86 )	5	5	5	4	(79 )
SEQUOYAH 1	53	46	(86 )	7	5	5	4	(79 )

Table 5.5

SAFETY ISSUE MANAGEMENT SYSTEM  
STATUS OF OTHER MPAS - SUMMARY BY PLANT

UNIT	IMPLEMENTATION			VERIFICATION		
	ITEMS APPLICABLE	ITEMS COMPLETED	PER CENT COMPLETED	ITEMS COVERED	ITEMS REQUIRED	PER CENT COMPLETED
SEQUOYAH 2	45	17	(82)	5	5	(79)
SOUTH TEXAS 1	41	33	(80)	5	3	(66)
SOUTH TEXAS 2	38	31	(81)	5	3	(66)
ST LUCIE 1	95	88	(92)	10	2	(69)
ST LUCIE 2	41	34	(82)	5	2	(59)
SUMNER 1	45	38	(84)	4	2	(50)
SURRY 1	97	89	(91)	10	9	(77)
SURRY 2	100	92	(91)	10	7	(70)
SUSQUEHANNA 1	40	29	(72)	7	3	(50)
SUSQUEHANNA 2	40	29	(72)	7	3	(50)
THREE MILE ISLAND 1	100	92	(91)	9	7	(87)
TURKEY POINT 3	99	92	(92)	10	8	(75)
TURKEY POINT 4	100	94	(93)	10	6	(69)
VERMONT YANKEE 1	82	70	(85)	12	7	(75)
VOGTLE 1	44	35	(79)	5	3	(59)
VOGTLE 2	36	27	(75)	5	3	(59)
WASHINGTON NUCLEAR 2	44	36	(81)	6	5	(83)
WATERFORD 3	39	31	(79)	5	2	(66)
WOLF CREEK 1	43	35	(81)	5	2	(66)
ZION 1	99	91	(91)	8	5	(83)
ZION 2	99	91	(91)	8	5	(83)
TOTALS / AVERAGES	7517	6576	85	879	776	75



Table 5.5

#### 5.4 Status by Issue

Table 5.6 presents summary information on the status of implementation and verification of each MPA. For each issue, the table shows the number of applicable plants, the number and percentage of plants that have completed implementation, and the number of plants remaining to complete implementation. For those issues requiring NRC verification of corrective actions, the table shows the number of plants covered by the issue, the number of plants at which verification is required, and the number and percentage of plants that have completed verification.

Of the current 171 MPA issues, 127 have been fully implemented, twenty-five issues remain to be implemented at 5 or less plants and 8 issues remain to be implemented at 6 to 15 plants. The remaining 11 MPA issues are to be implemented at 26 or more plants.

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
47. LOSS OF OFF-SITE POWER	2	2	(100)	0	NO				
75 (B089) SALEM ATWS 4.2.3 & 4.2.4 LIFE COMPONENTS	68	68	(100)	0	NO				
B059 (E004) BWR SINGLE LOOP OPERATION	15	15	(100)	0	NO				
B059 (E005) W N-1 LOOP OPERATION	8	8	(100)	0	NO				
BL-79-06 REVIEW OF OPERATIONAL ERRORS AND SYSTEM MISALIGNMENTS IDENTIFIED DURIN	58	58	(100)	0	NO				
BL-79-06A REVIEW OF OPERATIONAL ERRORS AND SYSTEM MISALIGNMENTS IDENTIFIED DURIN	5	5	(100)	0	NO				
BL-79-08 EVENTS RELEVANT TO BOILING WATER REACTORS IDENTIFIED DURING THREE MILE	5	5	(100)	0	NO				
BL-79-13 CRACKING IN FEEDWATER SYSTEM PIPING	48	48	(100)	0	NO				
BL-79-15 DEEP DRAFT PUMP DEFICIENCIES	109	109	(100)	0	YES	109	102	102	(100)
BL-79-27 LOSS OF NON-CLASS-1-E INSTRUMENTATION AND CONTROL SYSTEM BUS DURING OP	62	62	(100)	0	NO				
BL-80-04 ANALYSIS OF A PWR MAIN STEAM LINE BREAK WITH CONTINUED FEEDWATER ADDIT	45	45	(100)	0	NO				
BL-80-06 ENGINEERED SAFETY FEATURE (ESF) RESET CONTROLS	62	62	(100)	0	NO				
BL-80-07 BWR JET PUMP ASSEMBLY FAILURE	33	33	(100)	0	NO				
BL-80-11 MASONRY WALL DESIGN	64	64	(100)	0	YES	64	63	63	(100)
BL-80-18 MAINTENANCE OF ADEQUATE MINIMUM FLOW THRU CENTRIFUGAL CHARGING PUMPS F	43	43	(100)	0	NO				

Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
BL-87-01 THINNING OF PIPE WALLS IN NUCLEAR POWER PLANTS	109	109	(100)	0	NO				
BL-88-01 DEFECTS IN WESTINGHOUSE CIRCUIT BREAKERS	109	109	(100)	0	NO				
BL-88-02 STEAM GEERATOR TUBE RUPTURE (BULLETIN 88-02) (OLD MPA B099)	33	32	(96 )	1	NO				
BL-88-03 GE HFA RELAYS (BULLETIN 88-03)	109	107	(98 )	2	NO				
BL-88-04 SI PUMP FAILURE (BULLETIN 88-04) (OLD MPA B103)	106	103	(97 )	3	YES	106	35	35	(100)
BL-88-05 NONCONFORMING MATERIALS SUPPLIED BY PIPING SUPPLIES, INC. AT FOLSOM	109	109	(100)	0	NO				
BL-88-07 POWR OSCILLATIONS IN BOILING WATER REACTORS (BWRS)	37	35	(94 )	2	YES	37	37	36	(97 )
BL-88-08 THERMAL STRESSES IN PIPING CONNECTED TO REACTOR COOLANT SYSTEMS	109	95	(87 )	14	NO				
BL-88-09 THIMBLE TUBE THINNING IN WESTINGHOUSE REAXCTORS	50	50	(100)	0	NO				
BL-88-10 NONCONFORMING MOLDED-CASE CIRCUIT BREAKERS	109	107	(98 )	2	NO				
BL-88-11 PRESSURIZER SURGE LINE THERMAL STRATIFICATION	71	45	(63 )	26	NO				
BL-89-01 FAILURE OF WESTINGHOUSE STEAM GENERATOR TUBE MECHANICAL PLUGS	73	72	(98 )	1	NO				
BL-89-02 STRESS CORROSION CRACKING OF HIGH-HARDNESS TYPE 410 STAINLESS STEEL	109	106	(97 )	3	NO				
BL-89-03 POTENTIAL LOSS OF REQUIRED SHUTDOWN MARGIN DURING REFUELING OPERATIONS	72	72	(100)	0	NO				
BL-90-01 LOSS OF FILL-OIL IN TRANSMITTERS MANUFACTURED BY ROSEMOUNT	109	109	(100)	0	NO				

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Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
BL-90-02 LOSS OF THERMAL MARGIN CAUSED BY CHANNEL BOX BOW	37	37	(100)	0	NO				
BL-92-01 FAILURE OF THERMO-LAG 330 FIRE BARRIER SYSTEM	109	57	(52 )	52	NO				
BL-93-02 IMPL OF PROG CONTROLS FOR RAD EFFLUENT TECH SPECS IN ADM CONT SECTION	109	64	(58 )	45	NO				
BL-93-03 RESOLUTION OF ISSUES REL TO REACTOR VESSEL WATER LEVEL INST IN BWR'S	34	1	(2 )	33	NO				
GL-79-25 INFORMATION REQUIRED TO REVIEW CORPORATE CAPABILITIES	19	19	(100)	0	NO				
GL-79-32 TMI-2 LESSONS LEARNED TASK FORCE REPORT - NUREG-0578	59	59	(100)	0	NO				
GL-79-33 TRANSMITTING NUREG-0567- SECURITY TRAINING AND QUALIFICATIONS PLAN	62	62	(100)	0	NO				
GL-79-36 ADEQUACY OF STATION ELECTRIC DISTRIBUTION SYSTEMS	64	64	(100)	0	NO				
GL-79-43 REACTORS CAVITY SEAL RING GENERIC ISSUE (PWR)	16	16	(100)	0	NO				
GL-79-46 CONTAINMENT PURGING AND VENTING DURING NORMAL OPERATION - GUIDELINES	64	64	(100)	0	NO				
GL-79-58 ECCS CALCULATIONS ON FUEL CLADDING	42	42	(100)	0	NO				
GL-80-002 QUALITY ASSURANCE REQUIREMENTS REGARDING DIESEL GENERATOR FUEL OIL	40	40	(100)	0	YES	40	37	37	(100)
GL-80-024 NRC NUCLEAR DATA LINK (NDL)	66	66	(100)	0	NO				
GL-80-030 CLARIFICATION OF THE TERM "OPERABLE" AS IT APPLIES TO SINGLE FAILURE	62	62	(100)	0	NO				
GL-80-061 TMI-2 LESSONS LEARNED	20	20	(100)	0	NO				

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Table 5.6



S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
GL-81-01 QUALIFICATION OF INSPECTION, EXAMINATIONS, AND TESTING AND AUDIT PERSONNEL	54	54	(100)	0	NO				
GL-81-04 EMERGENCY PROCEDURE AND TRAINING FOR STATION BLACKOUT EVENTS	65	65	(100)	0	NO				
GL-81-14 SEISMIC QUALIFICATION OF AUXILIARY FEEDWATER SYSTEMS	42	42	(100)	0	NO				
GL-81-21 NATURAL CIRCULATION COOLDOWN	72	72	(100)	0	YES	72	67	60	(89 )
GL-83-08 MODIFICATION OF VACUUM BREAKERS ON MARK I CONTAINMENTS	23	22	(95 )	1	YES	23	23	21	(91 )
GL-83-43 REPORTING REQUIREMENTS OF 10 CFR PART 50, SECTIONS 50.72 AND 50.73, AND	79	79	(100)	0	NO				
GL-84-09 RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44(C)(3)(II)	21	15	(71 )	6	NO				
GL-84-15- PROPOSED STAFF ACTIONS TO IMPROVE AND MAINTAIN DIESEL GENERATOR RELIABILITY	85	85	(100)	0	NO				
GL-87-05 REQUEST FOR ADDITIONAL INFORMATION-ASSESSMENT OF LICENSEE MEASURES TO	23	23	(100)	0	NO				
GL-87-09 SECTIONS 3.0 AND 4.0 OF THE STANDARD TECHNICAL SPECIFICATIONS (STS) ON	64	60	(93 )	4	NO				
GL-87-12 LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE IN THE REACTOR COOLANT SYSTEM	70	70	(100)	0	NO				
GL-88-01 NRC POSITION ON IGSCC IN BWR AUSTENITIC STAINLESS STEEL PIPING	37	28	(75 )	9	NO				
GL-88-12 REMOVAL OF FIRE PROTECTION REQUIREMENTS FROM TECHNICAL SPECIFICATIONS	52	49	(94 )	3	NO				
GL-88-05 BORIC ACID CORROSION OF CARBON STEEL REACTOR PRESSURE BOUNDARY COMPONENTS	72	72	(100)	0	NO				
GL-88-06 REMOVAL OF ORGANIZATIONAL CHARTS FROM TECHNICAL SPECIFICATION ADMINISTRATION	101	101	(100)	0	NO				

Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
GL-88-11 NRC POSITION ON RADIATION EMBRITTLEMENT OF REACTOR VESSEL MATERIALS AN	109	104	(95 )	5	NO				
GL-88-16 REMOVAL OF CYCLE-SPECIFIC PARAMETER LIMITS FROM TECHNICAL SPECIFICAT-	84	84	(100)	0	NO				
GL-88-20 INDIVIDUAL PLANT EXAMINATION FOR SEVERE ACCIDENT VULNER. 10CFR50.54(F)	108	7	(6 )	101	NO				
GL-89-01 IMPL OF PROG CONTROLS FOR RAD EFFLUENT TECH SPECS IN ADM CONT SECTION	66	51	(77 )	15	NO				
GL-89-04 GUIDANCE ON DEVELOPING ACCEPTABLE INSERVICE TESTING PROGRAMS	40	30	(75 )	10	YES	40	38	3	(7 )
GL-89-06 TASK ACTION PLAN ITEM I.D.2 - SAFETY PARAMETER DISPLAY SYSTEM	95	90	(94 )	5	NO				
GL-89-07 POWER REACTOR SAFEGUARDS COTINGENCY PLANNING FOR SURFACE VEHICLE BOMBS	109	109	(100)	0	YES	109	108	108	(100)
GL-89-08 EROSION/CORROSION-INDUCED PIPE WALL THINNING	109	107	(98 )	2	NO				
GL-89-10 SAFETY-RELATED MOTOR-OPERATED VALVE TESTING AND SURVEILLANCE	109	1	(0 )	108	YES	109	109	9	(8 )
GL-89-14 LINE-ITEM IMPROV. IN TECH SPECS - REMOVAL OF 3.25 LIMIT ON EXT SURV	82	80	(97 )	2	NO				
GL-89-16 INSTALLATION OF A HARDENED WETWELL VENT (GL 89-16)	24	20	(83 )	4	NO				
GL-90-02 ALTERNATE REQ FOR FUEL ASSEMBLIES IN THE DESIGN FEAT SECT OF TECH SPEC	12	12	(100)	0	NO				
GL-90-09 ALT REQ FOR SNUBBER VISUAL INSPECTION INVERVALS & CORRECTIVE ACTIONS	71	70	(98 )	1	NO				
GL-91-01 REMOVAL OF THE SCHEDULE FOR THE WITHDRAWAL OF REACT VESSEL MAT SPEC.	22	21	(95 )	1	NO				
GL-91-04 CHANGES IN TECH SPEC SURV. INTERVALS TO ACCOMODATE A 24-MO FUEL CYCLE	7	4	(57 )	3	NO				

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Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
GL-91-06 ADEQUACY OF SAFETY-RELATED DC POWER SUPPLIES (GL 91-06) (GI A-30)	108	108	(100)	0	NO				
GL-91-08 REMOVAL OF COMPONENT LISTS FROM TECHNICAL SPECIFICATIONS	24	22	(91)	2	NO				
GL-91-09 MOD OF SURV INTERVAL FOR ELEC PROTO ASSEM IN POWER SUPPL	5	5	(100)	0	NO				
GL-91-11 VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48/49, GL 91-11)	109	102	(93)	7	NO				
GL-91-13 ESSENTIAL SERVICE WATER SYSTEM FAILURES (GL-91-13) (GI-130)	14	12	(85)	2	NO				
GL-92-01 REACTOR VESSEL STRUCTURAL INTEGRITY	109	0	(0)	109	NO				
GL-92-04 REACTOR VESSEL WATER LEVEL INSTRUMENTATION IN BWRS	37	27	(72)	10	YES	37	37	0	(0)
GL-92-08 THERMO-LAG 330-1 FIRE BARRIERS	109	30	(27)	79	NO				
GL-93-04 ROD CONTROL SYS FAIL & WITHDRAWAL OF ROD CONT CLUSTER ASSEMBLIES	49	0	(0)	49	NO				
MPA-A024 MISCELLANEOUS AMENDMENTS AND SEARCH REQUIREMENTS	96	96	(100)	0	NO				
MPA-A001 10 CFR 50.55 A(G) - ISI	63	63	(100)	0	NO				
MPA-A002 APPENDIX I - ALARA	64	64	(100)	0	NO				
MPA-A003 SECURITY REVIEWS-MODIFIED AMENDMENT PLANS	61	61	(100)	0	NO				
MPA-A004 APPENDIX J - CONTAINMENT LEAK TESTING	49	47	(95)	2	NO				
MPA-A005 GE MARK I CONTAINMENT TECH SPECS-SHORT TERM	19	19	(100)	0	NO				

Table 5.6

S A F E T Y I S S U E M A N A G E M E N T S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-A006 RESPIRATORY PROTECTION SYSTEM	11	11	(100)	0	NO				
MPA-A007 APPENDIX G - FRACTURE TOUGHNESS	11	11	(100)	0	NO				
MPA-A008 ECCS EVALUATION-GENERIC PER 50.46 COMPLIANCE	10	10	(100)	0	NO				
MPA-A009 PRESSURE VESSEL BELTLINE MATERIAL SURVEILLANCE	60	60	(100)	0	NO				
MPA-A010 CONTINGENCY PLANNING	62	62	(100)	0	NO				
MPA-A012 VITAL AREA ANALYSIS	59	59	(100)	0	NO				
MPA-A014 10CFR 50.55 A(G) - INSERVICE TESTING	50	50	(100)	0	NO				
MPA-B116 RESULTS OF NRC TESTING OF MOV5 (GL 89-10, SUPP3)	39	31	(79 )	8	NO				
MPA-B117 FAILURE OF WESTINGHOUSE SG TUBE MECHANICAL PLUGS (BL 90-01, SUPP2)	72	67	(93 )	5	NO				
MPA-B118 IPE EXTERNAL EVENTS (GL 88-20, SUPP 4)	108	1	(0 )	107	NO				
MPA-B122 LOSS OF FILL-OIL IN TRANSMITTERS MANUFACTURED BY ROSEMOUNT	109	16	(14 )	93	NO				
MPA-B001 DIESEL GENERATOR LOCKOUT	27	27	(100)	0	NO				
MPA-B002 FIRE PROTECTION	55	55	(100)	0	NO				
MPA-B003 PWR MODERATOR DILUTION	38	38	(100)	0	YES	38	34	34	(100)
MPA-B006 BWR RELIEF VALVE	22	22	(100)	0	NO				

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Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-B007 STEAM GENERATOR FEEDWATER FLOW INSTABILITY	24	24	(100)	0	NO				
MPA-B008 PWR HPSI-LPSI FLOW RESISTANCE	15	15	(100)	0	NO				
MPA-B009 CHARGING SYSTEMS PIPE VIBRATIONS	17	17	(100)	0	NO				
MPA-B010 BURNABLE POISON ROD FAILURE - B&W	3	3	(100)	0	NO				
MPA-B011 FLOOD OF EQUIPMENT IMPORTANT TO SAFETY	9	9	(100)	0	YES	9	3	1	(33 )
MPA-B012 STEAM GENERATOR TUBE INSPECTION	11	11	(100)	0	NO				
MPA-B013 FUEL ROD BOW	10	10	(100)	0	NO				
MPA-B014 CEA GUIDE TUBE WEAR	35	35	(100)	0	NO				
MPA-B015 C-E POISON ROD GROWTH	1	1	(100)	0	NO				
MPA-B016 EMERGENCY PLANNING AND REVISIONS	64	64	(100)	0	NO				
MPA-B018 WORTHINGTON RHR PUMP SHAFT INTEGRITY	2	2	(100)	0	NO				
MPA-B019 NEUTRON SHIELDING - CE REACTORS	2	2	(100)	0	NO				
MPA-B020 CONTAINMENT LEAKAGE DUE TO SEAL DETERIORATION	59	59	(100)	0	NO				
MPA-B021 LOSS OF 125-V DC BUS VOLTAGE WITH LOSS OF ANNUNCIATOR SYSTEM	59	59	(100)	0	NO				
MPA-B026 INADVERTANT SAFETY INJECTION DURING COOLDOWN	36	36	(100)	0	NO				

Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-B027 REVIEW RESPONSES TO IE BULLETIN 78-03 (OFFGAS EXPLOSIONS)	22	22	(100)	0	NO				
MPA-B029 BWR FEEDWATER PUMP TRIP	5	5	(100)	0	NO				
MPA-B030 STEAM GENERATOR REPLACEMENT PROGRAM	5	5	(100)	0	NO				
MPA-B032 BLOCKED SI SIGNAL DURING COOLDOWN	23	22	(95 )	1	NO				
MPA-B034 BWR JET PUMP INTEGRITY ASSURANCE	1	1	(100)	0	NO				
MPA-B035 ORIFICE ROD ASSEMBLY INTEGRITY - B&W	5	5	(100)	0	NO				
MPA-B036 RESISTANCE TEMPERATURE DETECTOR (RTD) RESPONSE - CE	7	7	(100)	0	NO				
MPA-B037 STEAM GENERATOR TUBE DENTING AND SUPPORT PLATE MODIFICATIONS - CE	9	9	(100)	0	NO				
MPA-B038 TENDON SURVEILLANCE - BECHTEL CONTAINMENTS	2	2	(100)	0	NO				
MPA-B039 PWR PRESSURE - TEMPERATURE LIMIT TECH SPECS	36	36	(100)	0	NO				
MPA-B040 PIPE SUPPORT BASE PLATES	1	1	(100)	0	NO				
MPA-B041 FIRE PROTECTION - FINAL TECH SPECS (INCLUDES SER SUPPLEMENTS)	65	63	(96 )	2	YES	65	62	61	(98 )
MPA-B046 ANALYSIS OF TURBINE DISC CRACKS	52	52	(100)	0	NO				
MPA-B049 PWR CONTROL ROD MISALIGNMENT	11	11	(100)	0	NO				
MPA-B052 REVIEW OF SAFETY ASPECT OF INADVERTENT SAFETY ACTIONS DURING SUR. TEST	27	27	(100)	0	NO				

Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-B055 B&O REPORT ON BWRs	5	5	(100)	0	NO				
MPA-B056 CONTROL RODS FAILURE TO INSERT. BWR	6	6	(100)	0	NO				
MPA-B057 DHR CAPABILITY	31	31	(100)	0	NO				
MPA-B064 ACC INDUCED FLUX ERRORS (B&W)	7	7	(100)	0	NO				
MPA-B067 THERMAL SHOCK	8	8	(100)	0	NO				
MPA-B070 FATIGUE TRANSIENT LIMIT TS	44	44	(100)	0	NO				
MPA-B073 PLANS FOR PREVENTING EXCEEDING PTS SCREENING CRITERION	7	7	(100)	0	NO				
MPA-B074 THERMAL SHIELD FOLLOW UP ANALYSIS	4	4	(100)	0	NO				
MPA-C006 PUMP SUPPORT-LAMELLAR TEARING	34	34	(100)	0	NO				
MPA-C001 PWR SECONDARY WATER CHEMISTRY MONITORING REQUIREMENTS	35	35	(100)	0	NO				
MPA-C002 BWR-RECIRC. PUMP TRIP (ATWS)	21	21	(100)	0	YES	21	21	19	(90 )
MPA-C003 QUALIFICATIONS OF RADIATION PROTECTION MANAGER	15	15	(100)	0	NO				
MPA-C004 FILTER TECH SPECS	16	16	(100)	0	NO				
MPA-C005 CONVERSION TO STANDARD TECH SPECS	8	8	(100)	0	NO				
MPA-C007 FUEL HANDLING ACCIDENT INSIDE CONTAINMENT	36	36	(100)	0	NO				

Table 5.6

S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-C008 BWR POST LOCA H2 CONTROL	9	9	(100)	0	NO				
MPA-C009 PWR AUX FW PUMPS	7	7	(100)	0	NO				
MPA-C011 RPS POWER SUPPLY	22	21	(95 )	1	NO				
MPA-C012 BORON SOLUBILITY DURING LONG TERM COOLING FOLLOWING LOCA	6	6	(100)	0	NO				
MPA-D002 ECCS ZIRC CLAD MODEL ERROR-COMPLIANCE WITH 10 CFR-46	21	21	(100)	0	NO				
MPA-D003 PRESSURIZER HEATUP RATE ERROR	16	16	(100)	0	NO				
MPA-D005 PLANT UPI MODEL PROBLEM	6	6	(100)	0	NO				
MPA-D006 PEAKING MODEL CHANGE FOR CE REACTOR CORE	6	6	(100)	0	NO				
MPA-D007 BWR POWER LEVEL FOR RWM	3	3	(100)	0	NO				
MPA-D008 DEFICIENCY IN CHEM ADDITION TO CONTAINMENT SPRAYS	3	3	(100)	0	NO				
MPA-D009 GE ECCS INPUT ERRORS	1	1	(100)	0	NO				
MPA-D011 FISSION GAS RELEASE	59	59	(100)	0	NO				
MPA-D013 B&W SMALL BREAK ERROR	6	6	(100)	0	NO				
MPA-D014 REACTOR VESSEL WELD - WIRE DEFICIENCY	10	10	(100)	0	NO				
MPA-D015 HIGH ENERGY LINE BREAK & CONSEQUENTIA. SYSTEM FAILURE	61	61	(100)	0	NO				

Table 5.6



S A F E T Y   I S S U E   M A N A G E M E N T   S Y S T E M

STATUS OF OTHER MPA(S) - SUMMARY BY ITEM

ITEM	IMPLEMENTATION				VERIFICATION				
	PLANTS APPLICABLE	PLANTS COMPLETED	PER CENT COMPLETED	PLANTS REMAINING	REQUIRED	PLANTS COVERED	PLANTS REQUIRED	PLANTS COMPLETED	PER CENT COMPLETED
MPA-D018 NUREG 0630 CLADDING MODELS (B&W PLANTS)	7	7	(100)	0	NO				
MPA-E001 SPENT FUEL POOL EXPANSIONS	30	30	(100)	0	NO				
MPA-E002 FUEL CASK DROP	7	7	(100)	0	NO				
MPA-E003 CORE RELOADS REQUIRING PRIOR NRC APPROVAL	30	30	(100)	0	NO				
MPA-E006 CEA POSITION INDICATION FAILURES - CE	7	7	(100)	0	NO				
MPA-E007 REACTOR PROTECTION SYSTEM LOGIC - CE	5	5	(100)	0	NO				

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Table 5.6

## 5.5 Conclusions

After a detailed review of the implementation and verification status of the resolution of the 171 MPAs, the NRC staff has concluded the following:

- The NRC closure for MPAs is adequate to protect the public health and safety.
- Licensees are making progress toward implementing MPA-related actions requested by the staff, and the framework exists to oversee future implementation actions associated with those MPAs that have been resolved.
- Progress is being made in verifying the completion of implementation actions associated with those MPAs that have been resolved.

The NRC staff will maintain close watch over implementation actions and schedules proposed by licensees to ensure that they are completed in accordance with regulatory requirements.

**Appendix A**

**LISTING OF  
UNIMPLEMENTED TMI ITEMS  
BY ISSUE**

## APPENDIX A

**This appendix provides a detailed list, by issue, of the 61 TMI Action Plan items not implemented, along with the projected target date for completing the item. Status and projected implementation dates are presented as of September 30, 1993.**

## TMI Issues (Listing of Open Items)

	ISSUE	MPA	PLANT	TAC	TITLE	IMPL DATE	
	1.	I.D.2.2	F075	BROWNS FERRY 1	M74602	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - INSTALLED	07/97
	2.	I.D.2.2	F075	BROWNS FERRY 2	M74607	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - INSTALLED	10/93
	3.	I.D.2.2	F075	BROWNS FERRY 3	M74612	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - INSTALLED	06/95
	4.	I.D.2.3	F009	BROWNS FERRY 1	M51223	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - FULLY IMPLEMENTED	07/97
	5.	I.D.2.3	F009	BROWNS FERRY 2	M51224	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - FULLY IMPLEMENTED	10/93
	6.	I.D.2.3	F009	BROWNS FERRY 3	M51225	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - FULLY IMPLEMENTED	06/95
	7.	I.D.2.3	F009	PALO VERDE 1	M56654	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - FULLY IMPLEMENTED	11/93
	8.	I.D.2.3	F009	PALO VERDE 3	M64581	PLANT-SAFETY PARAMETER DISPLAY CONSOLE - FULLY IMPLEMENTED	11/93
	9.	11.B.3.2	F076	BROWNS FERRY 3	M74613	POSTACCIDENT SAMPLING - CORRECTIVE ACTIONS	06/95
	10.	11.B.3.3	F077	BROWNS FERRY 1	M74603	POSTACCIDENT SAMPLING - PROCEDURES	07/97
	11.	11.B.3.3	F077	BROWNS FERRY 3	M74614	POSTACCIDENT SAMPLING - PROCEDURES	06/95
	12.	11.B.3.4	F012	BROWNS FERRY 1	M44423	POSTACCIDENT SAMPLING - PLANT MODIFICATIONS (LL CAT B)	07/97
	13.	11.B.3.4	F012	BROWNS FERRY 3	M44425	POSTACCIDENT SAMPLING - PLANT MODIFICATIONS (LL CAT B)	06/95
A-3	14.	11.D.1.3	F084	FORT CALHOUN 1	M75832	RELIEF & SAFETY VALVE TEST REQUIREMENTS - BLOCK-VALVE TESTING	06/94
	15.	11.E.4.2.1-4	F078	BROWNS FERRY 1	M74604	CONTAINMENT ISOLATION DEPENDABILITY - IMP. DIVERSE ISOLATION	07/97
	16.	11.E.4.2.1-4	F078	BROWNS FERRY 3	M74615	CONTAINMENT ISOLATION DEPENDABILITY - IMP. DIVERSE ISOLATION	06/95
	17.	11.E.4.2.6	F079	BROWNS FERRY 3	M74616	CONTAINMENT ISOLATION DEPENDABILITY - CNTMT PURGE VALVES	06/95
	18.	11.F.1.1	F081	BROWNS FERRY 1	M74605	ACCIDENT-MONITORING - PROCEDURES	07/97
	19.	11.F.1.1	F081	BROWNS FERRY 3	M74617	ACCIDENT-MONITORING - PROCEDURES	06/95
	20.	11.F.1.2.A	F020	BROWNS FERRY 1	M44903	ACCIDENT-MONITORING - NOBLE GAS MONITOR	07/97
	21.	11.F.1.2.A	F020	BROWNS FERRY 3	M44905	ACCIDENT-MONITORING - NOBLE GAS MONITOR	06/95
	22.	11.F.1.2.B	F021	BROWNS FERRY 1	M44974	ACCIDENT-MONITORING - IODINE/PARTICULATE SAMPLING	07/97
	23.	11.F.1.2.B	F021	BROWNS FERRY 3	M44976	ACCIDENT-MONITORING - IODINE/PARTICULATE SAMPLING	06/95
	24.	11.F.1.2.C	F022	BROWNS FERRY 1	M45045	ACCIDENT-MONITORING - CONTAINMENT HIGH-RANGE MONITOR	07/97
	25.	11.F.1.2.C	F022	BROWNS FERRY 3	M45047	ACCIDENT-MONITORING - CONTAINMENT HIGH-RANGE MONITOR	06/95
	26.	11.F.1.2.D	F023	BROWNS FERRY 3	M47584	ACCIDENT-MONITORING - CONTAINMENT PRESSURE	06/95
	27.	11.F.1.2.E	F024	BROWNS FERRY 3	M47655	ACCIDENT-MONITORING - CONTAINMENT WATER LEVEL	06/95
	28.	11.F.2.4	F026	BROWNS FERRY 1	M45116	INSTRMNTATN FOR DETECT. OF INADEQ CORE CLNG INSTLL ADD'L INSTRMNTATN	07/97
	29.	11.F.2.4	F026	BROWNS FERRY 3	M45118	INSTRMNTATN FOR DETECT. OF INADEQ CORE CLNG INSTLL ADD'L INSTRMNTATN	06/95
	30.	11.F.2.4	F026	DRESDEN 3	M45130	INSTRMNTATN FOR DETECT. OF INADEQ CORE CLNG INSTLL ADD'L INSTRMNTATN	11/93
	31.	11.F.2.4	F026	QUAD CITIES 2	M45165	INSTRMNTATN FOR DETECT. OF INADEQ CORE CLNG INSTLL ADD'L INSTRMNTATN	11/93
	32.	11.K.3.13.B	F043	BROWNS FERRY 1	M45532	B&O TASK FORCE - HPCI & RCIC INITIATION LEVELS MODIFICATION	07/97
	33.	11.K.3.13.B	F043	BROWNS FERRY 3	M45534	B&O TASK FORCE - HPCI & RCIC INITIATION LEVELS MODIFICATION	06/95
	34.	11.K.3.18.C	F048	BROWNS FERRY 1	M45680	B&O TASK FORCE - ADS ACTUATION MODIFICATIONS	07/97
	35.	11.K.3.18.C	F048	BROWNS FERRY 3	M45682	B&O TASK FORCE - ADS ACTUATION MODIFICATIONS	06/95

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36.	11.K.3.27	F054	BROWNS FERRY 1	M45776	B&O TASK FORCE - COMMON REFERENCE LEVEL FOR BURS	07/97
37.	11.K.3.27	F054	BROWNS FERRY 3	M45778	B&O TASK FORCE - COMMON REFERENCE LEVEL FOR BURS	06/95
38.	11.K.3.28	F055	BROWNS FERRY 1	M48260	B&O TASK FORCE - QUALIFICATION OF ADS ACCUMULATORS	07/97
39.	11.K.3.28	F055	BROWNS FERRY 3	M48262	B&O TASK FORCE - QUALIFICATION OF ADS ACCUMULATORS	06/95
40.	111.D.3.4.3	F070	HADDAM NECK	M46450	CONTROL ROOM HABITABILITY - IMPLEMENT MODIFICATIONS	12/93
41.	MPA-F071	F071	BIG ROCK POINT 1	M56103	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/93
42.	MPA-F071	F071	BROWNS FERRY 1	M56104	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	07/97
43.	MPA-F071	F071	BROWNS FERRY 3	M56106	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	06/95
44.	MPA-F071	F071	DIABLO CANYON 1	M56117	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	05/94
45.	MPA-F071	F071	DIABLO CANYON 2	M68040	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	10/94
46.	MPA-F071	F071	HADDAM NECK	M56128	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	03/96
47.	MPA-F071	F071	MILLSTONE 1	M56138	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/95
48.	MPA-F071	F071	NINE MILE POINT 1	M56141	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	03/95
49.	MPA-F071	F071	NORTH ANNA 1	M56142	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/94
50.	MPA-F071	F071	NORTH ANNA 2	M56143	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/94
51.	MPA-F071	F071	PILGRIM 1	M59329	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	03/95
52.	MPA-F071	F071	POINT BEACH 1	M56152	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/93
53.	MPA-F071	F071	POINT BEACH 2	M56153	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/93
54.	MPA-F071	F071	PRAIRIE ISLAND 1	M56154	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	04/94
55.	MPA-F071	F071	PRAIRIE ISLAND 2	M56155	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	11/93
56.	MPA-F071	F071	SAN ONOFRE 2	M56163	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	10/93
57.	MPA-F071	F071	SAN ONOFRE 3	M56164	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	10/93
58.	MPA-F071	F071	SEQUOYAH 1	M56165	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/93
59.	MPA-F071	F071	SEQUOYAH 2	M56166	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/93
60.	MPA-F071	F071	SURRY 1	M56170	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/94
61.	MPA-F071	F071	SURRY 2	M56171	I.D.1.2 DETAILED CONTROL ROOM REVIEW (FOLLOWUP TO F-8)	12/94

**Appendix B**

**LISTING OF  
UNIMPLEMENTED USI ITEMS  
BY ISSUE**

## APPENDIX B

This appendix provides a detailed list, by issue, of the 177 USI items not implemented, along with the projected date for completing the item. Status and projected implementation dates are presented as of September 30, 1993.



Unresolved Safety Issues (Listing of Open Items)

	ISSUE	MPA	PLANT	TAC	TITLE	IMPL DATE	
B-3	1.	A-24	B060	BROWNS FERRY 1	M42481	QUALIFICATION OF CLASS 1E SAFETY-RELATED EQUIPMENT	07/97
	2.	A-24	B060	BROWNS FERRY 3	M42483	QUALIFICATION OF CLASS 1E SAFETY-RELATED EQUIPMENT	06/95
	3.	A-31	S004	HADDAM NECK	M77025	RHR SHUTDOWN REQUIREMENTS	10/94
	4.	A-44	A022	ARKANSAS 1	M68508	STATION BLACKOUT	12/94
	5.	A-44	A022	ARKANSAS 2	M68509	STATION BLACKOUT	12/94
	6.	A-44	A022	BIG ROCK POINT 1	M68514	STATION BLACKOUT	10/94
	7.	A-44	A022	BROWNS FERRY 1	M68517	STATION BLACKOUT	06/95
	8.	A-44	A022	BROWNS FERRY 2	M68518	STATION BLACKOUT	06/95
	9.	A-44	A022	BROWNS FERRY 3	M68519	STATION BLACKOUT	06/95
	10.	A-44	A022	BRUNSWICK 1	M68520	STATION BLACKOUT	10/93
	11.	A-44	A022	BRUNSWICK 2	M68521	STATION BLACKOUT	10/93
	12.	A-44	A022	CALVERT CLIFFS 1	M68525	STATION BLACKOUT	05/96
	13.	A-44	A022	CALVERT CLIFFS 2	M68526	STATION BLACKOUT	05/96
	14.	A-44	A022	CATAWBA 1	M68527	STATION BLACKOUT	06/94
	15.	A-44	A022	CATAWBA 2	M68528	STATION BLACKOUT	06/94
	16.	A-44	A022	COMANCHE PEAK 1	M68530	STATION BLACKOUT	07/94
	17.	A-44	A022	COOK 1	M68532	STATION BLACKOUT	11/93
	18.	A-44	A022	COOK 2	M68533	STATION BLACKOUT	11/93
	19.	A-44	A022	CRYSTAL RIVER 3	M68535	STATION BLACKOUT	06/94
	20.	A-44	A022	FARLEY 1	M68543	STATION BLACKOUT	04/94
	21.	A-44	A022	FARLEY 2	M68544	STATION BLACKOUT	10/93
	22.	A-44	A022	FITZPATRICK	M68546	STATION BLACKOUT	06/94
	23.	A-44	A022	FORT CALHOUN 1	M68547	STATION BLACKOUT	11/93
	24.	A-44	A022	GINNA	M68548	STATION BLACKOUT	09/94
	25.	A-44	A022	HADDAM NECK	M68551	STATION BLACKOUT	10/93
	26.	A-44	A022	HARRIS 1	M68552	STATION BLACKOUT	06/94
	27.	A-44	A022	HOPE CREEK 1	M68555	STATION BLACKOUT	06/94
	28.	A-44	A022	INDIAN POINT 2	M68556	STATION BLACKOUT	12/93
	29.	A-44	A022	INDIAN POINT 3	M68557	STATION BLACKOUT	06/94
	30.	A-44	A022	KEWAUNEE	M68558	STATION BLACKOUT	11/93
	31.	A-44	A022	MCGUIRE 1	M68564	STATION BLACKOUT	06/94
	32.	A-44	A022	MCGUIRE 2	M68565	STATION BLACKOUT	06/94
	33.	A-44	A022	MILLSTONE 1	M68566	STATION BLACKOUT	02/94
	34.	A-44	A022	MILLSTONE 2	M68567	STATION BLACKOUT	04/94
	35.	A-44	A022	MILLSTONE 3	M68568	STATION BLACKOUT	10/93

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36.	A-44	A022	MONTICELLO	M68569	STATION BLACKOUT	12/94
37.	A-44	A022	NORTH ANNA 1	M68572	STATION BLACKOUT	12/94
38.	A-44	A022	NORTH ANNA 2	M68573	STATION BLACKOUT	12/94
39.	A-44	A022	PALISADES	M68578	STATION BLACKOUT	10/93
40.	A-44	A022	PALO VERDE 1	M68579	STATION BLACKOUT	11/93
41.	A-44	A022	PALO VERDE 2	M68580	STATION BLACKOUT	11/94
42.	A-44	A022	PALO VERDE 3	M68581	STATION BLACKOUT	04/94
43.	A-44	A022	PEACH BOTTOM 2	M68582	STATION BLACKOUT	10/94
44.	A-44	A022	PEACH BOTTOM 3	M68583	STATION BLACKOUT	10/94
45.	A-44	A022	PERRY 1	M68584	STATION BLACKOUT	07/94
46.	A-44	A022	QUAD CITIES 1	M68590	STATION BLACKOUT	12/95
47.	A-44	A022	QUAD CITIES 2	M68591	STATION BLACKOUT	12/95
48.	A-44	A022	RIVER BEND 1	M68593	STATION BLACKOUT	03/94
49.	A-44	A022	ROBINSON 2	M68595	STATION BLACKOUT	11/93
50.	A-44	A022	SALEM 1	M68596	STATION BLACKOUT	01/94
51.	A-44	A022	SALEM 2	M68597	STATION BLACKOUT	01/94
52.	A-44	A022	SAN ONOFRE 2	M68599	STATION BLACKOUT	09/94
53.	A-44	A022	SAN ONOFRE 3	M68600	STATION BLACKOUT	09/94
54.	A-44	A022	SEQUOYAH 1	M68603	STATION BLACKOUT	06/94
55.	A-44	A022	SEQUOYAH 2	M68604	STATION BLACKOUT	06/94
56.	A-44	A022	SURRY 1	M68611	STATION BLACKOUT	01/96
57.	A-44	A022	SURRY 2	M68612	STATION BLACKOUT	05/96
58.	A-44	A022	SUSQUEHANNA 1	M68613	STATION BLACKOUT	06/94
59.	A-44	A022	SUSQUEHANNA 2	M68614	STATION BLACKOUT	06/94
60.	A-44	A022	VOGTLE 1	M68621	STATION BLACKOUT	02/94
61.	A-44	A022	VOGTLE 2	M73447	STATION BLACKOUT	02/94
62.	A-44	A022	WASHINGTON NUCLEAR 2	M68626	STATION BLACKOUT	06/94
63.	A-44	A022	WATERFORD 3	M68623	STATION BLACKOUT	06/94
64.	A-46	B105	ARKANSAS 1	M69426	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
65.	A-46	B105	ARKANSAS 2	M69427	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
66.	A-46	B105	BEAVER VALLEY 1	M69428	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
67.	A-46	B105	BIG ROCK POINT 1	M69429	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
68.	A-46	B105	BROWNS FERRY 1	M69430	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/97
69.	A-46	B105	BROWNS FERRY 2	M69431	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/96
70.	A-46	B105	BROWNS FERRY 3	M69432	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/96

71.	A-46	P105	BRUNSWICK 1	M69433	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	06/95
72.	A-46	B105	BRUNSWICK 2	M69434	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	10/95
73.	A-46	B105	CALVERT CLIFFS 1	M69435	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/96
74.	A-46	B105	CALVERT CLIFFS 2	M69436	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/96
75.	A-46	B105	COOK 1	M69437	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
76.	A-46	B105	COOK 2	M69438	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
77.	A-46	B105	COOPER STATION	M69439	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
78.	A-46	B105	CRYSTAL RIVER 3	M69440	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/95
79.	A-46	B105	DAVIS-BESSE 1	M69441	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	09/95
80.	A-46	B105	DRESDEN 2	M69442	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
81.	A-46	B105	DRESDEN 3	M69443	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
82.	A-46	B105	DUANE ARNOLD	M69444	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
83.	A-46	B105	FARLEY 1	M69445	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	05/95
84.	A-46	B105	FITZPATRICK	M69446	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	05/95
85.	A-46	P105	FORT CALHOUN 1	M69447	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	09/95
86.	A-46	B105	GINNA	M69449	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	05/95
87.	A-46	B105	HADDAM NECK	M69450	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/93
88.	A-46	B105	HATCH 1	M69451	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	08/95
89.	A-46	B105	HATCH 2	M69452	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	08/95
90.	A-46	B105	INDIAN POINT 2	M69453	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
91.	A-46	B105	INDIAN POINT 3	M69454	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
92.	A-46	B105	KEWAUNEE	M69455	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
93.	A-46	B105	MILLSTONE 1	M69458	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	08/96
94.	A-46	B105	MILLSTONE 2	M69459	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	05/95
95.	A-46	B105	MONTICELLO	M69460	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
96.	A-46	B105	NINE MILE POINT 1	M69461	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	05/95
97.	A-46	B105	NORTH ANNA 1	M69462	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/94
98.	A-46	B105	NORTH ANNA 2	M69463	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	06/95
99.	A-46	B105	OCONEE 1	M69464	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	06/95
100.	A-46	B105	OCONEE 2	M69465	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	06/95
101.	A-46	B105	OCONEE 3	M69466	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	06/95
102.	A-46	B105	OYSTER CREEK 1	M69467	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	09/95
103.	A-46	B105	PALISADES	M69468	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
104.	A-46	B105	PEACH BOTTOM 2	M69469	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
105.	A-46	B105	PEACH BOTTOM 3	M69470	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95

106.	A-46	B105	PILGRIM 1	M69471	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
107.	A-46	B105	POINT BEACH 1	M69472	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	08/95
108.	A-46	B105	POINT BEACH 2	M69473	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	08/95
109.	A-46	B105	PRAIRIE ISLAND 1	M69474	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
110.	A-46	B105	PRAIRIE ISLAND 2	M69475	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
111.	A-46	B105	QUAD CITIES 1	M69476	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
112.	A-46	B105	QUAD CITIES 2	M69477	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
113.	A-46	B105	ROBINSON 2	M69478	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/94
114.	A-46	B105	SALEM 1	M69479	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
115.	A-46	B105	SALEM 2	M69480	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
116.	A-46	B105	ST LUCIE 1	M69483	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/93
117.	A-46	B105	SURRY 1	M69484	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
118.	A-46	B105	SURRY 2	M69485	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
119.	A-46	B105	THREE MILE ISLAND 1	M69486	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/95
120.	A-46	B105	TURKEY POINT 3	M68303	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/93
121.	A-46	B105	TURKEY POINT 4	M68304	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	12/93
122.	A-46	B105	VERMONT YANKEE 1	M69490	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	07/95
123.	A-46	B105	ZION 1	M69492	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
124.	A-46	B105	ZION 2	M69493	SEISMIC QUALIFICATION OF EQUIPMENT IN OPERATING PLANTS	11/95
125.	A-47	B113	BROWNS FERRY 1	M74915	SAFETY IMPLICATION OF CONTROL SYSTEMS	07/97
126.	A-47	B113	BROWNS FERRY 3	M74917	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/95
127.	A-47	B113	CALVERT CLIFFS 1	M74923	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
128.	A-47	B113	CALVERT CLIFFS 2	M74924	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
129.	A-47	B113	COOPER STATION	M74932	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
130.	A-47	B113	CRYSTAL RIVER 3	M74933	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
131.	A-47	B113	DRESDEN 2	M74937	SAFETY IMPLICATION OF CONTROL SYSTEMS	01/94
132.	A-47	B113	DRESDEN 3	M74938	SAFETY IMPLICATION OF CONTROL SYSTEMS	01/94
133.	A-47	B113	FITZPATRICK	M74943	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
134.	A-47	B113	FORT CALHOUN 1	M74944	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
135.	A-47	B113	HATCH 1	M74949	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
136.	A-47	B113	HATCH 2	M74950	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
137.	A-47	B113	LASALLE 1	M74955	SAFETY IMPLICATION OF CONTROL SYSTEMS	/
138.	A-47	B113	LASALLE 2	M74956	SAFETY IMPLICATION OF CONTROL SYSTEMS	/
139.	A-47	B113	MILLSTONE 1	M74962	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
140.	A-47	B113	MILLSTONE 2	M74963	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94

141.	A-47	B113	NINE MILE POINT 1	M74966	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
142.	A-47	B113	NINE MILE POINT 2	M74967	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
143.	A-47	B113	OCONEE 1	M74970	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
144.	A-47	B113	OCONEE 2	M74971	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
145.	A-47	B113	OCONEE 3	M74972	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
146.	A-47	B113	OYSTER CREEK 1	M74973	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/94
147.	A-47	B113	PALISADES	M74974	SAFETY IMPLICATION OF CONTROL SYSTEMS	10/93
148.	A-47	B113	PEACH BOTTOM 2	M74978	SAFETY IMPLICATION OF CONTROL SYSTEMS	04/94
149.	A-47	B113	PEACH BOTTOM 3	M74979	SAFETY IMPLICATION OF CONTROL SYSTEMS	04/94
150.	A-47	B113	PILGRIM 1	M74981	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
151.	A-47	B113	POINT BEACH 1	M74982	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
152.	A-47	B113	POINT BEACH 2	M74983	SAFETY IMPLICATION OF CONTROL SYSTEMS	06/94
153.	A-47	B113	QUAD CITIES 1	M74986	SAFETY IMPLICATION OF CONTROL SYSTEMS	/
154.	A-47	B113	QUAD CITIES 2	M74987	SAFETY IMPLICATION OF CONTROL SYSTEMS	/
155.	A-47	B113	SAN ONOFRE 2	M74994	SAFETY IMPLICATION OF CONTROL SYSTEMS	05/94
156.	A-47	B113	SAN ONOFRE 3	M74995	SAFETY IMPLICATION OF CONTROL SYSTEMS	05/94
157.	A-47	B113	ST LUCIE 1	M75002	SAFETY IMPLICATION OF CONTROL SYSTEMS	07/94
158.	A-47	B113	ST LUCIE 2	M75003	SAFETY IMPLICATION OF CONTROL SYSTEMS	07/94
159.	A-47	B113	TURKEY POINT 3	M75011	SAFETY IMPLICATION OF CONTROL SYSTEMS	04/94
160.	A-47	B113	TURKEY POINT 4	M75012	SAFETY IMPLICATION OF CONTROL SYSTEMS	04/94
161.	A-47	B113	WATERFORD 3	M75016	SAFETY IMPLICATION OF CONTROL SYSTEMS	01/94
162.	A-47	B113	ZION 1	M75022	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
163.	A-47	B113	ZION 2	M75023	SAFETY IMPLICATION OF CONTROL SYSTEMS	12/93
164.	A-48	S003	CLINTON 1	M81719	HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	03/94
165.	A-48	S003	COOK 1	M49520	HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	12/93
166.	A-48	S003	COOK 2	M49519	HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	12/93
167.	A-48	S003	GRAND GULF 1	M77024	HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	12/93
168.	A-48	S003	PERRY 1	M66121	HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	12/93
169.	A-48	S003	RIVER BEND 1	M59714	HYDROGEN CONTROL MEASURES AND EFFECTS OF HYDROGEN BURNS	02/94
170.	A-7	D001	BROWNS FERRY 1	M07929	MARK I LONG-TERM PROGRAM	07/97
171.	A-7	D001	BROWNS FERRY 3	M07931	MARK I LONG-TERM PROGRAM	06/95
172.	A-9	A020	BROWNS FERRY 1	M59072	ATWS	07/97
173.	A-9	A020	BROWNS FERRY 3	M59074	ATWS	06/95
174.	A-9	A020	DRESDEN 3	M59090	ATWS	03/94
175.	A-9	A020	LASALLE 2	M59108	ATWS	11/93

176. A-9 A020 QUAD CITIES 1 M59132 ATWS  
177. A-9 A020 QUAD CITIES 2 M59133 ATWS

11/93  
11/93

**Appendix C**

**LISTING OF  
UNIMPLEMENTED GSI ITEMS  
BY ISSUE**

## APPENDIX C

This appendix provides a detailed list, by issue, of the 158 GSI items not implemented, along with the projected date for completing the item. Status and projected implementation dates are presented as of September 30, 1993.



Generic Safety Issues (Listing of Open Items)

	ISSUE	MPA	PLANT	TAC	TITLE	IMPL DATE	
	1.	124	S001	CRYSTAL RIVER 3	M67802	AUXILIARY FEEDWATER SYSTEM RELIABILITY	10/93
	2.	40	B065	BROWNS FERRY 1	M43727	SAFETY CONCERNS ASSOCIATED WITH PIPE BREAKS IN BWR SCRAM SYSTEM	07/97
	3.	40	B065	BROWNS FERRY 3	M43736	SAFETY CONCERNS ASSOCIATED WITH PIPE BREAKS IN BWR SCRAM SYSTEM	06/95
	4.	41	B058	BROWNS FERRY 3	M51014	BWR SCRAM DISCHARGE VOLUME SYSTEMS	06/95
	5.	67.3.3	A017	BEAVER VALLEY 1	M51071	IMPROVED ACCIDENT MONITORING	02/94
	6.	67.3.3	A017	BROWNS FERRY 1	M51073	IMPROVED ACCIDENT MONITORING	07/97
	7.	67.3.3	A017	BROWNS FERRY 3	M51075	IMPROVED ACCIDENT MONITORING	06/95
	8.	67.3.3	A017	CALVERT CLIFFS 1	M51078	IMPROVED ACCIDENT MONITORING	06/94
	9.	67.3.3	A017	CALVERT CLIFFS 2	M51079	IMPROVED ACCIDENT MONITORING	06/94
	10.	67.3.3	A017	COOK 1	M51080	IMPROVED ACCIDENT MONITORING	10/93
	11.	67.3.3	A017	COOK 2	M51081	IMPROVED ACCIDENT MONITORING	10/93
	12.	67.3.3	A017	COOPER STATION	M51082	IMPROVED ACCIDENT MONITORING	11/94
	13.	67.3.3	A017	FERMI 2	M59620	IMPROVED ACCIDENT MONITORING	12/94
C-3	14.	67.3.3	A017	FORT CALHOUN 1	M51091	IMPROVED ACCIDENT MONITORING	11/93
	15.	67.3.3	A017	GINNA	M51093	IMPROVED ACCIDENT MONITORING	12/93
	16.	67.3.3	A017	GRAND GULF 1	M51094	IMPROVED ACCIDENT MONITORING	11/93
	17.	67.3.3	A017	HADDAM NECK	M51095	IMPROVED ACCIDENT MONITORING	12/94
	18.	67.3.3	A017	HATCH 1	M51096	IMPROVED ACCIDENT MONITORING	12/94
	19.	67.3.3	A017	HATCH 2	M51097	IMPROVED ACCIDENT MONITORING	12/94
	20.	67.3.3	A017	INDIAN POINT 2	M51098	IMPROVED ACCIDENT MONITORING	12/93
	21.	67.3.3	A017	Kewaunee	M51100	IMPROVED ACCIDENT MONITORING	10/93
	22.	67.3.3	A017	LASALLE 1	M51102	IMPROVED ACCIDENT MONITORING	/
	23.	67.3.3	A017	LASALLE 2	M56407	IMPROVED ACCIDENT MONITORING	/
	24.	67.3.3	A017	MILLSTONE 1	M51106	IMPROVED ACCIDENT MONITORING	11/93
	25.	67.3.3	A017	MILLSTONE 3	M65327	IMPROVED ACCIDENT MONITORING	12/93
	26.	67.3.3	A017	NINE MILE POINT 2	M79172	IMPROVED ACCIDENT MONITORING	10/93
	27.	67.3.3	A017	OYSTER CREEK 1	M51115	IMPROVED ACCIDENT MONITORING	12/94
	28.	67.3.3	A017	PERRY 1	M79010	IMPROVED ACCIDENT MONITORING	/
	29.	67.3.3	A017	QUAD CITIES 1	M51124	IMPROVED ACCIDENT MONITORING	05/94
	30.	67.3.3	A017	QUAD CITIES 2	M51125	IMPROVED ACCIDENT MONITORING	05/94
	31.	67.3.3	A017	SAN ONOFRE 2	M51131	IMPROVED ACCIDENT MONITORING	11/93
	32.	67.3.3	A017	SAN ONOFRE 3	M51132	IMPROVED ACCIDENT MONITORING	11/93
	33.	67.3.3	A017	SOUTH TEXAS 1	M63480	IMPROVED ACCIDENT MONITORING	02/94
	34.	67.3.3	A017	SOUTH TEXAS 2	M77956	IMPROVED ACCIDENT MONITORING	02/94
	35.	67.3.3	A017	ST LUCIE 1	M51135	IMPROVED ACCIDENT MONITORING	09/96

36.	67.3.3	A017	ST LUCIE 2	M51136	IMPROVED ACCIDENT MONITORING	
37.	67.3.3	A017	SUMNER 1	M51137	IMPROVED ACCIDENT MONITORING	09/95
38.	67.3.3	A017	ZION 1	M51367	IMPROVED ACCIDENT MONITORING	01/94
39.	67.3.3	A017	ZION 2	M51368	IMPROVED ACCIDENT-MONITORING	10/93
40.	70	B114	BEAVER VALLEY 1	M77328	PORV AND BLOCK VALVE RELIABILITY	10/93
41.	70	B114	BEAVER VALLEY 2	M77329	PORV AND BLOCK VALVE RELIABILITY	03/94
42.	70	B114	BRAIDWOOD 1	M77332	PORV AND BLOCK VALVE RELIABILITY	03/94
43.	70	B114	BRAIDWOOD 2	M77333	PORV AND BLOCK VALVE RELIABILITY	/
44.	70	B114	CALVERT CLIFFS 1	M77337	PORV AND BLOCK VALVE RELIABILITY	/
45.	70	B114	CALVERT CLIFFS 2	M77338	PORV AND BLOCK VALVE RELIABILITY	12/93
46.	70	B114	COOK 1	M77343	PORV AND BLOCK VALVE RELIABILITY	12/93
47.	70	B114	COOK 2	M77344	PORV AND BLOCK VALVE RELIABILITY	11/93
48.	70	B114	CRYSTAL RIVER 3	M77345	PORV AND BLOCK VALVE RELIABILITY	11/93
49.	70	B114	FORT CALHOUN 1	M77351	PORV AND BLOCK VALVE RELIABILITY	12/93
50.	70	B114	GINNA	M77352	PORV AND BLOCK VALVE RELIABILITY	12/93
51.	70	B114	HADDAM NECK	M77353	PORV AND BLOCK VALVE RELIABILITY	01/94
52.	70	B114	INDIAN POINT 2	M77355	PORV AND BLOCK VALVE RELIABILITY	10/93
53.	70	B114	INDIAN POINT 3	M77356	PORV AND BLOCK VALVE RELIABILITY	01/94
54.	70	B114	KEWAUNEE	M77357	PORV AND BLOCK VALVE RELIABILITY	12/93
55.	70	B114	MCGUIRE 1	M77359	PORV AND BLOCK VALVE RELIABILITY	12/93
56.	70	B114	MCGUIRE 2	M77360	PORV AND BLOCK VALVE RELIABILITY	01/94
57.	70	B114	MILLSTONE 2	M77361	PORV AND BLOCK VALVE RELIABILITY	01/94
58.	70	B114	MILLSTONE 3	M77362	PORV AND BLOCK VALVE RELIABILITY	01/94
59.	70	B114	NORTH ANNA 1	M77363	PORV AND BLOCK VALVE RELIABILITY	11/93
60.	70	B114	NORTH ANNA 2	M77364	PORV AND BLOCK VALVE RELIABILITY	12/93
61.	70	B114	OCONEE 1	M77365	PORV AND BLOCK VALVE RELIABILITY	12/93
62.	70	B114	OCONEE 2	M77366	PORV AND BLOCK VALVE RELIABILITY	01/94
63.	70	B114	OCONEE 3	M77367	PORV AND BLOCK VALVE RELIABILITY	01/94
64.	70	B114	PALISADES	M77368	PORV AND BLOCK VALVE RELIABILITY	01/94
65.	70	B114	POINT BEACH 1	M77369	PORV AND BLOCK VALVE RELIABILITY	11/93
66.	70	B114	POINT BEACH 2	M77370	PORV AND BLOCK VALVE RELIABILITY	04/94
67.	70	B114	ROBINSON 2	M77373	PORV AND BLOCK VALVE RELIABILITY	04/94
68.	70	B114	SALEM 1	M77374	PORV AND BLOCK VALVE RELIABILITY	10/93
69.	70	B114	SALEM 2	M77375	PORV AND BLOCK VALVE RELIABILITY	05/94
70.	70	B114	SOUTH TEXAS 1	M77380	PORV AND BLOCK VALVE RELIABILITY	05/94
						10/93

71.	70	B114	SOUTH TEXAS 2	M77381	PORV AND BLOCK VALVE RELIABILITY	10/93
72.	70	B114	SUMNER 1	M77384	PORV AND BLOCK VALVE RELIABILITY	01/94
73.	70	B114	SURRY 1	M77385	PORV AND BLOCK VALVE RELIABILITY	12/93
74.	70	B114	SURRY 2	M77386	PORV AND BLOCK VALVE RELIABILITY	12/93
75.	70	B114	TURKEY POINT 3	M77389	PORV AND BLOCK VALVE RELIABILITY	12/93
76.	70	B114	TURKEY POINT 4	M77390	PORV AND BLOCK VALVE RELIABILITY	12/93
77.	70	B114	ZION 1	M77397	PORV AND BLOCK VALVE RELIABILITY	12/93
78.	70	B114	ZION 2	M77398	PORV AND BLOCK VALVE RELIABILITY	12/93
79.	75 (B085)	B085	BROWNS FERRY 1	M53571	SALEM ATWS 1.2 DATA CAPABILITY	07/97
80.	75 (B085)	B085	BROWNS FERRY 2	M53572	SALEM ATWS 1.2 DATA CAPABILITY	10/93
81.	75 (B085)	B085	BROWNS FERRY 3	M53573	SALEM ATWS 1.2 DATA CAPABILITY	06/95
82.	75 (B090)	B090	CRYSTAL RIVER 3	M53551	SALEM ATWS 4.3 W AND B&W T.S.	10/93
83.	75 (B091)	B091	CRYSTAL RIVER 3	M53953	SALEM ATWS 4.4 B&W TEST PROCEDURES	12/93
84.	75 (B093)	B093	BROWNS FERRY 1	M53964	SALEM ATWS 4.5.2 & 4.5.3 TEST ALTERNATIVES	07/97
85.	75 (B093)	B093	BROWNS FERRY 3	M53966	SALEM ATWS 4.5.2 & 4.5.3 TEST ALTERNATIVES	06/95
86.	94	B115	ARKANSAS 2	M77399	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	01/94
87.	94	B115	BEAVER VALLEY 1	M77400	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	03/94
88.	94	B115	BEAVER VALLEY 2	M77401	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	03/94
89.	94	B115	CALVERT CLIFFS 1	M77407	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
90.	94	B115	CALVERT CLIFFS 2	M77408	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
91.	94	B115	COOK 1	M77413	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	11/93
92.	94	B115	COOK 2	M77414	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	11/93
93.	94	B115	FARLEY 1	M77419	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
94.	94	B115	FARLEY 2	M77420	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
95.	94	B115	FORT CALHOUN 1	M77421	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
96.	94	B115	GINNA	M77422	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	01/94
97.	94	B115	HADDAM NECK	M77423	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	10/93
98.	94	B115	INDIAN POINT 2	M77425	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	01/94
99.	94	B115	INDIAN POINT 3	M77426	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
100.	94	B115	KEWAUNEE	M77427	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93
101.	94	B115	MAINE YANKEE	M77428	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	01/94
102.	94	B115	MCGUIRE 1	M77429	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	01/94
103.	94	B115	MCGUIRE 2	M77430	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	01/94
104.	94	B115	MILLSTONE 2	M77431	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	10/93
105.	94	B115	NORTH ANNA 1	M77433	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LWRS	12/93

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106.	94	B115	NORTH ANNA 2	M77434	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
107.	94	B115	PALISADES	M77438	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	11/93
108.	94	B115	POINT BEACH 1	M77442	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	04/94
109.	94	B115	POINT BEACH 2	M77443	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	04/94
110.	94	B115	ROBINSON 2	M77446	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	10/93
111.	94	B115	SALEM 1	M77447	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	05/94
112.	94	B115	SALEM 2	M77448	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	05/94
113.	94	B115	SOUTH TEXAS 1	M77455	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	10/93
114.	94	B115	SOUTH TEXAS 2	M77456	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	10/93
115.	94	B115	SUMMER 1	M77459	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	01/94
116.	94	B115	SURRY 1	M77460	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
117.	94	B115	SURRY 2	M77461	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
118.	94	B115	TURKEY POINT 3	M77464	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
119.	94	B115	TURKEY POINT 4	M77465	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
120.	94	B115	ZION 1	M77473	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
121.	94	B115	ZION 2	M77474	ADDITIONAL LOW-TEMP. OVERPRESSURE PROTECTION FOR LMRS	12/93
122.	GL-80-014	B045	HADDAM NECK	M12916	LMR PRIMARY COOLANT SYSTEM PRESSURE ISOLATION VALVES	10/94
123.	GL-88-14	B107	BROWNS FERRY 1	M71631	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	07/97
124.	GL-88-14	B107	BROWNS FERRY 3	M71633	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	06/95
125.	GL-88-14	B107	CATAMBA 1	M71641	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	12/93
126.	GL-88-14	B107	CATAMBA 2	M71642	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	12/93
127.	GL-88-14	B107	DRESDEN 2	M71653	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	03/94
128.	GL-88-14	B107	DRESDEN 3	M71654	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	03/94
129.	GL-88-14	B107	MCGUIRE 1	M71679	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	12/93
130.	GL-88-14	B107	MCGUIRE 2	M71680	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	12/93
131.	GL-88-14	B107	NINE MILE POINT 1	M71685	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	03/95
132.	GL-88-14	B107	OYSTER CREEK 1	M71692	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	12/93
133.	GL-88-14	B107	QUAD CITIES 1	M71706	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	11/93
134.	GL-88-14	B107	QUAD CITIES 2	M71707	INSTRUMENT AIR SUPPLY SYSTEM PROBLEMS AFFECTING SAFETY-RELATED EQUIPM	11/93
135.	GL-88-17	L817	CALVERT CLIFFS 2	M69731	LOSS OF DECAY HEAT REMOVAL	07/95
136.	GL-88-17	L817	PALO VERDE 2	M69763	LOSS OF DECAY HEAT REMOVAL	10/93
137.	GL-89-13	L913	BRAIDWOOD 2	M73969	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	01/94
138.	GL-89-13	L913	BROWNS FERRY 1	M73970	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	11/94
139.	GL-89-13	L913	BROWNS FERRY 2	M73971	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	11/94
140.	GL-89-13	L913	BROWNS FERRY 3	M73972	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	11/94

141.	GL-89-13	L913	CALVERT CLIFFS 1	M73978	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	12/94
142.	GL-89-13	L913	CALVERT CLIFFS 2	M73979	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	12/94
143.	GL-89-13	L913	CATAMBA 1	M73980	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
144.	GL-89-13	L913	CATAMBA 2	M73981	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
145.	GL-89-13	L913	DRESDEN 3	M73996	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
146.	GL-89-13	L913	GINNA	M74007	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	12/93
147.	GL-89-13	L913	MAINE YANKEE	M74022	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	12/93
148.	GL-89-13	L913	MCGUIRE 1	M74023	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	08/94
149.	GL-89-13	L913	MCGUIRE 2	M74024	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	08/94
150.	GL-89-13	L913	MILLSTONE 1	M74025	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	02/94
151.	GL-89-13	L913	MILLSTONE 3	M74027	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
152.	GL-89-13	L913	PERRY 1	M74043	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	12/93
153.	GL-89-13	L913	QUAD CITIES 2	M74050	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
154.	GL-89-13	L913	WOLF CREEK 1	M74088	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
155.	GL-89-13	L913	ZION 1	M74090	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
156.	GL-89-13	L913	ZION 2	M74091	SERVICE WATER SYSTEM PROBLEMS AFFECTING SAFETY RELATED EQUIPMENT	10/93
157.	NPA-8023	8023	CRYSTAL RIVER 3	M10017	DEGRADED GRID VOLTAGE	12/93
158.	NPA-8023	8023	MILLSTONE 1	M60207	DEGRADED GRID VOLTAGE	10/93

**Appendix D**

**LISTING OF OTHER  
UNIMPLEMENTED MPA ITEMS  
BY ISSUE**

## APPENDIX D

**This appendix provides a detailed list, by issue, of the 941 MPA items not implemented, along with the projected date for completing the item. Status and projected implementation dates are presented as of September 30, 1993.**

Other Multi-Plant Actions (Listing of Open Items)

ISSUE	MPA	PLANT	TAC	TITLE	IMPL DATE	
1.	BL-88-02	X802	COOK 1	M67301	STEAM GENERATOR TUBE RUPTURE (888-02) (OLD MPA 8099)	06/94
2.	BL-88-03	X803	BROWNS FERRY 1	M73852	GE MFA RELAYS (888-03)	07/97
3.	BL-88-03	X803	BROWNS FERRY 3	M73854	GE MFA RELAYS (888-03)	06/95
4.	BL-88-04	X804	BROWNS FERRY 1	M69888	SI PUMP FAILURE (888-04) (OLD MPA B103)	07/97
5.	BL-88-04	X804	BROWNS FERRY 3	M69890	SI PUMP FAILURE (888-04) (OLD MPA B103)	06/95
6.	BL-88-04	X804	NINE MILE POINT 1	M69940	SI PUMP FAILURE (888-04) (OLD MPA B103)	03/95
7.	BL-88-07	X807	BROWNS FERRY 1	M72805	POWER OSCILLATIONS IN BWR'S (888-07)	07/97
8.	BL-88-07	X807	BROWNS FERRY 3	M72769	POWER OSCILLATIONS IN BWR'S (888-07)	06/95
9.	BL-88-08	X808	BRAIDWOOD 1	M69602	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	04/94
10.	BL-88-08	X808	BRAIDWOOD 2	M69603	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	10/93
11.	BL-88-08	X808	BYRON 1	M69609	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	10/93
12.	BL-88-08	X808	BYRON 2	M69610	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	10/93
13.	BL-88-08	X808	COOK 1	M69618	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	12/93
14.	BL-88-08	X808	COOK 2	M69619	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	12/93
15.	BL-88-08	X808	KEWAUNEE	M69663	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	/
16.	BL-88-08	X808	NINE MILE POINT 1	M69655	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	03/95
17.	BL-88-08	X808	PALO VERDE 1	M69664	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	/
18.	BL-88-08	X808	PALO VERDE 2	M69665	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	/
19.	BL-88-08	X808	PALO VERDE 3	M69666	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	/
20.	BL-88-08	X808	SALEM 1	M69680	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	12/93
21.	BL-88-08	X808	SALEM 2	M69681	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	12/93
22.	BL-88-08	X808	SOUTH TEXAS 1	M69689	THERMAL STRESS IN PIPING CONNECTED TO RCS (888-08)(OLD MPA B107)	12/93
23.	BL-88-10	X810	POINT BEACH 1	M71338	NONCONFORMING MOLDED-CASE CIRCUIT BREAKERS (888-10)	12/93
24.	BL-88-10	X810	POINT BEACH 2	M71339	NONCONFORMING MOLDED-CASE CIRCUIT BREAKERS (888-10)	12/93
25.	BL-88-11	X811	ARKANSAS 2	M72109	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
26.	BL-88-11	X811	BRAIDWOOD 2	M72115	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
27.	BL-88-11	X811	BYRON 1	M72116	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
28.	BL-88-11	X811	BYRON 2	M72117	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
29.	BL-88-11	X811	CALVERT CLIFFS 1	M72119	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	02/94
30.	BL-88-11	X811	CALVERT CLIFFS 2	M72120	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	02/94
31.	BL-88-11	X811	CRYSTAL RIVER 3	M72127	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
32.	BL-88-11	X811	DAVIS-BESSE 1	M72128	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/94
33.	BL-88-11	X811	FORT CALHOUN 1	M72134	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
34.	BL-88-11	X811	MAINE YANKEE	M72141	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
35.	BL-88-11	X811	OCONEE 1	M72148	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93



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36.	BL-88-11	X811	OCONEE 2	M72149	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
37.	BL-88-11	X811	OCONEE 3	M72150	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
38.	BL-88-11	X811	PALISADES	M72151	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	11/93
39.	BL-88-11	X811	PALO VERDE 1	M72152	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
40.	BL-88-11	X811	PALO VERDE 2	M72153	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
41.	BL-88-11	X811	PALO VERDE 3	M72154	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
42.	BL-88-11	X811	POINT BEACH 1	M72155	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
43.	BL-88-11	X811	POINT BEACH 2	M72156	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	10/93
44.	BL-88-11	X811	ROBINSON 2	M72160	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	01/94
45.	BL-88-11	X811	SALEM 1	M72161	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
46.	BL-88-11	X811	SAN ONOFRE 2	M72164	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	11/93
47.	BL-88-11	X811	SAN ONOFRE 3	M72165	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	11/93
48.	BL-88-11	X811	SEQUOYAH 2	M72167	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	04/94
49.	BL-88-11	X811	THREE MILE ISLAND 1	M72174	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
50.	BL-88-11	X811	WATERFORD 3	M72180	THERMAL STRATIFICATION IN PZR SURGE LINE (888-11)	12/93
51.	BL-89-01	X901	COOK 1	M73164	FAILURE OF WEST STEAM GENERATOR TUBE MECHANICAL PLUGS (889-01)	12/94
52.	BL-89-02	X902	PRAIRIE ISLAND 1	M74298	STRESS CORR CRACKING OF ANCHOR DARLING CK VALVE BOLTING (889-02)	05/94
53.	BL-89-02	X902	PRAIRIE ISLAND 2	M74299	STRESS CORR CRACKING OF ANCHOR DARLING CK VALVE BOLTING (889-02)	11/93
54.	BL-89-02	X902	TURKEY POINT 3	M74325	STRESS CORR CRACKING OF ANCHOR DARLING CK VALVE BOLTING (889-02)	06/94
55.	BL-92-01	X201	ARKANSAS 1	M83839	THERMO-LAG (BULLETIN 92-01)	/
56.	BL-92-01	X201	ARKANSAS 2	M83840	THERMO-LAG (BULLETIN 92-01)	06/95
57.	BL-92-01	X201	BEAVER VALLEY 1	M83841	THERMO-LAG (BULLETIN 92-01)	12/99
58.	BL-92-01	X201	BEAVER VALLEY 2	M83842	THERMO-LAG (BULLETIN 92-01)	12/99
59.	BL-92-01	X201	BRAIDWOOD 1	M83846	THERMO-LAG (BULLETIN 92-01)	/
60.	BL-92-01	X201	BRAIDWOOD 2	M83847	THERMO-LAG (BULLETIN 92-01)	/
61.	BL-92-01	X201	BROWNS FERRY 1	M83848	THERMO-LAG (BULLETIN 92-01)	07/97
62.	BL-92-01	X201	BROWNS FERRY 2	M83849	THERMO-LAG (BULLETIN 92-01)	12/93
63.	BL-92-01	X201	BROWNS FERRY 3	M83850	THERMO-LAG (BULLETIN 92-01)	03/94
64.	BL-92-01	X201	BYRON 1	M83853	THERMO-LAG (BULLETIN 92-01)	/
65.	BL-92-01	X201	BYRON 2	M83854	THERMO-LAG (BULLETIN 92-01)	/
66.	BL-92-01	X201	CLINTON 1	M83860	THERMO-LAG (BULLETIN 92-01)	06/94
67.	BL-92-01	X201	COMANCHE PEAK 1	M83861	THERMO-LAG (BULLETIN 92-01)	12/93
68.	BL-92-01	X201	COOK 1	M83863	THERMO-LAG (BULLETIN 92-01)	12/93
69.	BL-92-01	X201	COOK 2	M83864	THERMO-LAG (BULLETIN 92-01)	12/93
70.	BL-92-01	X201	DAVIS-BESSE 1	M83867	THERMO-LAG (BULLETIN 92-01)	12/94

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71.	BL-92-01	X201	DUANE ARNOLD	M83872	THERMO-LAG (BULLETIN 92-01)	12/93
72.	BL-92-01	X201	FERMI 2	M83875	THERMO-LAG (BULLETIN 92-01)	12/93
73.	BL-92-01	X201	GRAND GULF 1	M83879	THERMO-LAG (BULLETIN 92-01)	12/94
74.	BL-92-01	X201	HARRIS 1	M83881	THERMO-LAG (BULLETIN 92-01)	12/93
75.	BL-92-01	X201	HATCH 1	M83882	THERMO-LAG (BULLETIN 92-01)	12/95
76.	BL-92-01	X201	HATCH 2	M83883	THERMO-LAG (BULLETIN 92-01)	12/94
77.	BL-92-01	X201	INDIAN POINT 2	M83885	THERMO-LAG (BULLETIN 92-01)	12/93
78.	BL-92-01	X201	LASALLE 1	M83888	THERMO-LAG (BULLETIN 92-01)	/
79.	BL-92-01	X201	LASALLE 2	M83889	THERMO-LAG (BULLETIN 92-01)	/
80.	BL-92-01	X201	MCGUIRE 1	M83893	THERMO-LAG (BULLETIN 92-01)	/
81.	BL-92-01	X201	MCGUIRE 2	M83894	THERMO-LAG (BULLETIN 92-01)	/
82.	BL-92-01	X201	MILLSTONE 1	M83895	THERMO-LAG (BULLETIN 92-01)	06/94
83.	BL-92-01	X201	NINE MILE POINT 1	M83899	THERMO-LAG (BULLETIN 92-01)	12/93
84.	BL-92-01	X201	NINE MILE POINT 2	M83900	THERMO-LAG (BULLETIN 92-01)	12/93
85.	BL-92-01	X201	NORTH ANNA 1	M83901	THERMO-LAG (BULLETIN 92-01)	12/93
86.	BL-92-01	X201	NORTH ANNA 2	M83902	THERMO-LAG (BULLETIN 92-01)	12/93
87.	BL-92-01	X201	PALISADES	M83907	THERMO-LAG (BULLETIN 92-01)	/
88.	BL-92-01	X201	PALO VERDE 1	M83908	THERMO-LAG (BULLETIN 92-01)	/
89.	BL-92-01	X201	PALO VERDE 2	M83909	THERMO-LAG (BULLETIN 92-01)	/
90.	BL-92-01	X201	PALO VERDE 3	M83910	THERMO-LAG (BULLETIN 92-01)	/
91.	BL-92-01	X201	PEACH BOTTOM 2	M83911	THERMO-LAG (BULLETIN 92-01)	12/94
92.	BL-92-01	X201	PEACH BOTTOM 3	M83912	THERMO-LAG (BULLETIN 92-01)	12/94
93.	BL-92-01	X201	PRAIRIE ISLAND 1	M83917	THERMO-LAG (BULLETIN 92-01)	/
94.	BL-92-01	X201	PRAIRIE ISLAND 2	M83918	THERMO-LAG (BULLETIN 92-01)	/
95.	BL-92-01	X201	SAN ONOFRE 2	M83928	THERMO-LAG (BULLETIN 92-01)	/
96.	BL-92-01	X201	SAN ONOFRE 3	M83929	THERMO-LAG (BULLETIN 92-01)	/
97.	BL-92-01	X201	SURRY 1	M83936	THERMO-LAG (BULLETIN 92-01)	12/93
98.	BL-92-01	X201	SURRY 2	M83937	THERMO-LAG (BULLETIN 92-01)	12/93
99.	BL-92-01	X201	SUSQUEHANNA 1	M83938	THERMO-LAG (BULLETIN 92-01)	12/93
100.	BL-92-01	X201	SUSQUEHANNA 2	M83939	THERMO-LAG (BULLETIN 92-01)	12/93
101.	BL-92-01	X201	THREE MILE ISLAND 1	M83940	THERMO-LAG (BULLETIN 92-01)	12/93
102.	BL-92-01	X201	VERMONT YANKEE 1	M83944	THERMO-LAG (BULLETIN 92-01)	12/93
103.	BL-92-01	X201	VOGTLE 1	M83945	THERMO-LAG (BULLETIN 92-01)	12/93
104.	BL-92-01	X201	VOGTLE 2	M83946	THERMO-LAG (BULLETIN 92-01)	12/93
105.	BL-92-01	X201	WATERFORD 3	M83947	THERMO-LAG (BULLETIN 92-01)	/

106.	BL-92-01	X201	WOLF CREEK 1	M83951	THERMO-LAG (BULLETIN 92-01)	/
107.	BL-93-02	X302	ARKANSAS 1	M86526	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
108.	BL-93-02	X302	BEAVER VALLEY 1	M86528	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
109.	BL-93-02	X302	BEAVER VALLEY 2	M86529	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
110.	BL-93-02	X302	BIG ROCK POINT 1	M86532	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
111.	BL-93-02	X302	BRAIDWOOD 1	M86533	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
112.	BL-93-02	X302	BRAIDWOOD 2	M86534	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
113.	BL-93-02	X302	BROWNS-FERRY 1	M86535	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	07/97
114.	BL-93-02	X302	BROWNS FERRY 3	M86537	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	06/95
115.	BL-93-02	X302	BYRON 1	M86540	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
116.	BL-93-02	X302	BYRON 2	M86541	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
117.	BL-93-02	X302	CALLAWAY 1	M86542	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
118.	BL-93-02	X302	CATAWBA 1	M86545	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
119.	BL-93-02	X302	CATAWBA 2	M86546	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
120.	BL-93-02	X302	COOK 1	M86550	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
121.	BL-93-02	X302	COOK 2	M86551	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
122.	BL-93-02	X302	CRYSTAL RIVER 3	M86553	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
123.	BL-93-02	X302	FARLEY 1	M86560	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
124.	BL-93-02	X302	FARLEY 2	M86561	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
125.	BL-93-02	X302	GINNA	M86565	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
126.	BL-93-02	X302	HOPE CREEK 1	M86571	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
127.	BL-93-02	X302	LASALLE 1	M86575	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
128.	BL-93-02	X302	LASALLE 2	M86576	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
129.	BL-93-02	X302	LIMERICK 1	M86577	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
130.	BL-93-02	X302	LIMERICK 2	M86578	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
131.	BL-93-02	X302	MCGUIRE 1	M86580	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
132.	BL-93-02	X302	MCGUIRE 2	M86581	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
133.	BL-93-02	X302	PALISADES	M86594	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
134.	BL-93-02	X302	PALO VERDE 1	M86595	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
135.	BL-93-02	X302	PALO VERDE 2	M86596	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
136.	BL-93-02	X302	PALO VERDE 3	M86597	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
137.	BL-93-02	X302	PEACH BOTTOM 2	M86598	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	10/93
138.	BL-93-02	X302	PEACH BOTTOM 3	M86599	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	10/93
139.	BL-93-02	X302	PERRY 1	M86600	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
140.	BL-93-02	X302	PILGRIM 1	M86601	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93

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141.	BL-93-02	X302	POINT BEACH 1	M86602	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
142.	BL-93-02	X302	POINT BEACH 2	M86603	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
143.	BL-93-02	X302	ROBINSON 2	M86609	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	11/93
144.	BL-93-02	X302	SALEM 1	M86610	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
145.	BL-93-02	X302	SALEM 2	M86611	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
146.	BL-93-02	X302	SAN ONOFRE 2	M86612	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
147.	BL-93-02	X302	SAN ONOFRE 3	M86613	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
148.	BL-93-02	X302	SUSQUEHANNA 1	M86624	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	05/94
149.	BL-93-02	X302	SUSQUEHANNA 2	M86625	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	05/94
150.	BL-93-02	X302	VERMONT YANKEE 1	M86629	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	12/93
151.	BL-93-02	X302	WATERFORD 3	M86632	DEBRIS PLUGGING OF EMERGENCY CORE COOLING SUCTION STRAINERS	/
152.	BL-93-03	X303	BROWNS FERRY 1	M86882	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	07/97
153.	BL-93-03	X303	BROWNS FERRY 2	M86883	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/94
154.	BL-93-03	X303	BROWNS FERRY 3	M86884	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	06/95
155.	BL-93-03	X303	BRUNSWICK 1	M86885	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
156.	BL-93-03	X303	BRUNSWICK 2	M86886	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
157.	BL-93-03	X303	CLINTON 1	M86887	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	11/93
158.	BL-93-03	X303	COOPER STATION	M86888	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
159.	BL-93-03	X303	DRESDEN 2	M86889	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	09/94
160.	BL-93-03	X303	DRESDEN 3	M86890	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	03/94
161.	BL-93-03	X303	DUANE ARNOLD	M86891	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	10/93
162.	BL-93-03	X303	FERMI 2	M86892	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	04/94
163.	BL-93-03	X303	GRAND GULF 1	M86893	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93
164.	BL-93-03	X303	HATCH 1	M86894	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/95
165.	BL-93-03	X303	HATCH 2	M86895	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/95
166.	BL-93-03	X303	HOPE CREEK 1	M86896	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	03/94
167.	BL-93-03	X303	LASALLE 1	M86897	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
168.	BL-93-03	X303	LASALLE 2	M86898	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
169.	BL-93-03	X303	LIMERICK 1	M86899	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93
170.	BL-93-03	X303	LIMERICK 2	M86900	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93
171.	BL-93-03	X303	MONTICELLO	M86901	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	11/94
172.	BL-93-03	X303	NINE MILE POINT 1	M86902	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	03/95
173.	BL-93-03	X303	NINE MILE POINT 2	M86903	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93
174.	BL-93-03	X303	OYSTER CREEK 1	M86904	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	11/94
175.	BL-93-03	X303	PEACH BOTTOM 2	M86905	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93

176.	BL-93-03	X303	PEACH BOTTOM 3	M86906	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93
177.	BL-93-03	X303	PERRY 1	M86907	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	10/93
178.	BL-93-03	X303	QUAD CITIES 1	M86909	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
179.	BL-93-03	X303	QUAD CITIES 2	M86910	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
180.	BL-93-03	X303	RIVER BEND 1	M86911	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
181.	BL-93-03	X303	SUSQUEHANNA 1	M86912	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	12/93
182.	BL-93-03	X303	SUSQUEHANNA 2	M86913	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	05/94
183.	BL-93-03	X303	VERMONT YANKEE 1	M86914	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	11/93
184.	BL-93-03	X303	WASHINGTON NUCLEAR 2	M86915	VESSEL WATER LEVEL INSTRUMENTATION IN BWR'S: RES. OF ISSUES	/
185.	GL-83-08	D020	BROWNS FERRY 1	M57144	MARK I DRYWELL VACUUM BREAKERS (GL83-08)	07/97
186.	GL-84-09	A019	DRESDEN 2	M56579	RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44 (GL84-09)	12/97
187.	GL-84-09	A019	DRESDEN 3	M56580	RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44 (GL84-09)	12/97
188.	GL-84-09	A019	MILLSTONE 1	M65067	RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44 (GL84-09)	02/94
189.	GL-84-09	A019	OYSTER CREEK 1	M62980	RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44 (GL84-09)	11/93
190.	GL-84-09	A019	QUAD CITIES 1	M55148	RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44 (GL84-09)	09/95
191.	GL-84-09	A019	QUAD CITIES 2	M55149	RECOMBINER CAPABILITY REQUIREMENTS OF 10 CFR 50.44 (GL84-09)	12/94
192.	GL-87-09	D024	BRUNSWICK 1	M64910	MODE CHAGES AND LCO'S - TECH SPECS 3.0 AND 4.0 (GL 87-09)	/
193.	GL-87-09	D024	BRUNSWICK 2	M64911	MODE CHAGES AND LCO'S - TECH SPECS 3.0 AND 4.0 (GL 87-09)	/
194.	GL-87-09	D024	LASALLE 1	M75789	MODE CHAGES AND LCO'S - TECH SPECS 3.0 AND 4.0 (GL 87-09)	10/93
195.	GL-87-09	D024	LASALLE 2	M75790	MODE CHAGES AND LCO'S - TECH SPECS 3.0 AND 4.0 (GL 87-09)	10/93
196.	GL-88-01	B097	DRESDEN 2	M69132	IGSSCC PROBLEMS IN BWR PIPING	11/94
197.	GL-88-01	B097	DRESDEN 3	M69133	IGSSCC PROBLEMS IN BWR PIPING	11/94
198.	GL-88-01	B097	PERRY 1	M69152	IGSSCC PROBLEMS IN BWR PIPING	12/93
199.	GL-88-01	B097	QUAD CITIES 1	M69154	IGSSCC PROBLEMS IN BWR PIPING	11/95
200.	GL-88-01	B097	QUAD CITIES 2	M69155	IGSSCC PROBLEMS IN BWR PIPING	11/94
201.	GL-88-01	B097	SUSQUEHANNA 1	M69158	IGSSCC PROBLEMS IN BWR PIPING	11/93
202.	GL-88-01	B097	SUSQUEHANNA 2	M69159	IGSSCC PROBLEMS IN BWR PIPING	11/93
203.	GL-88-01	B097	VERMONT YANKEE 1	M69160	IGSSCC PROBLEMS IN BWR PIPING	12/93
204.	GL-88-01	B097	WASHINGTON NUCLEAR 2	M69161	IGSSCC PROBLEMS IN BWR PIPING	04/94
205.	GL-88-11	A023	BEAVER VALLEY 2	M71463	R.G. 1.99 REV 2 (PRESSURIZED THERMAL SHOCK RULE) (GL 88-11)	/
206.	GL-88-11	A023	BROWNS FERRY 1	M71467	R.G. 1.99 REV 2 (PRESSURIZED THERMAL SHOCK RULE) (GL 88-11)	07/97
207.	GL-88-11	A023	BROWNS FERRY 3	M71469	R.G. 1.99 REV 2 (PRESSURIZED THERMAL SHOCK RULE) (GL 88-11)	06/95
208.	GL-88-11	A023	SAN ONOFRE 2	M71546	R.G. 1.99 REV 2 (PRESSURIZED THERMAL SHOCK RULE) (GL 88-11)	/
209.	GL-88-11	A023	SAN ONOFRE 3	M71547	R.G. 1.99 REV 2 (PRESSURIZED THERMAL SHOCK RULE) (GL 88-11)	/
210.	GL-88-12	D022	BRUNSWICK 1	M79416	REMOVAL OF FIRE PROTECTION TECH SPECS (GL 88-12)	/

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211.	GL-88-12	D022	BRUNSWICK 2	M79417	REMOVAL OF FIRE PROTECTION TECH SPECS (GL 88-12)	12/93
212.	GL-88-12	D022	FORT CALHOUN 1	M87825	REMOVAL OF FIRE PROTECTION TECH SPECS (GL 88-12)	05/94
213.	GL-88-20	B111	ARKANSAS 1	M74376	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
214.	GL-88-20	B111	ARKANSAS 2	M74377	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	03/94
215.	GL-88-20	B111	BEAVER VALLEY 1	M74378	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	04/95
216.	GL-88-20	B111	BIG ROCK POINT 1	M74381	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
217.	GL-88-20	B111	BRAIDWOOD 1	M74382	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
218.	GL-88-20	B111	BRAIDWOOD 2	M74383	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
219.	GL-88-20	B111	BROWNS FERRY 1	M74384	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
220.	GL-88-20	B111	BROWNS FERRY 2	M74385	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	11/93
221.	GL-88-20	B111	BROWNS FERRY 3	M74386	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
222.	GL-88-20	B111	BRUNSWICK 1	M74387	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	02/94
223.	GL-88-20	B111	BRUNSWICK 2	M74388	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	02/94
224.	GL-88-20	B111	BYRON 1	M74389	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	04/94
225.	GL-88-20	B111	BYRON 2	M74390	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	04/94
226.	GL-88-20	B111	CALLAWAY 1	M74391	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
227.	GL-88-20	B111	CALVERT CLIFFS 1	M74392	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
228.	GL-88-20	B111	CALVERT CLIFFS 2	M74393	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
229.	GL-88-20	B111	CATAMBA 1	M74394	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
230.	GL-88-20	B111	CATAMBA 2	M74395	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
231.	GL-88-20	B111	CLINTON 1	M74396	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
232.	GL-88-20	B111	COMANCHE PEAK 1	M74397	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	09/94
233.	GL-88-20	B111	COOK 1	M74398	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
234.	GL-88-20	B111	COOK 2	M74399	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
235.	GL-88-20	B111	COOPER STATION	M74400	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
236.	GL-88-20	B111	CRYSTAL RIVER 3	M74401	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/94
237.	GL-88-20	B111	DAVIS-BESSE 1	M74402	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/94
238.	GL-88-20	B111	DRESDEN 2	M74405	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
239.	GL-88-20	B111	DRESDEN 3	M74406	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
240.	GL-88-20	B111	DUANE ARNOLD	M74407	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
241.	GL-88-20	B111	FARLEY 1	M74408	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
242.	GL-88-20	B111	FARLEY 2	M74409	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
243.	GL-88-20	B111	FERMI 2	M74410	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
244.	GL-88-20	B111	FITZPATRICK	M74411	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
245.	GL-88-20	B111	FORT CALHOUN 1	M74412	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/

246.	GL-88-20	B111	GINNA	M74414	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	01/95
247.	GL-88-20	B111	GRAND GULF 1	M74415	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
248.	GL-88-20	B111	HADDAM NECK	M74417	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
249.	GL-88-20	B111	HARRIS 1	M74418	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/94
250.	GL-88-20	B111	HATCH 1	M74419	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/96
251.	GL-88-20	B111	HATCH 2	M74420	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/96
252.	GL-88-20	B111	HOPE CREEK 1	M74421	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/94
253.	GL-88-20	B111	INDIAN POINT 2	M74422	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	01/94
254.	GL-88-20	B111	INDIAN POINT 3	M74423	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
255.	GL-88-20	B111	KEWAUNEE	M74424	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
256.	GL-88-20	B111	LASALLE 1	M74425	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
257.	GL-88-20	B111	LASALLE 2	M74426	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
258.	GL-88-20	B111	LIMERICK 1	M74427	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
259.	GL-88-20	B111	LIMERICK 2	M74428	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
260.	GL-88-20	B111	MAINE YANKEE	M74429	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/94
261.	GL-88-20	B111	MCGUIRE 1	M74430	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	09/94
262.	GL-88-20	B111	MCGUIRE 2	M74431	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	09/94
263.	GL-88-20	B111	MILLSTONE 1	M74432	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
264.	GL-88-20	B111	MILLSTONE 2	M74433	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
265.	GL-88-20	B111	MONTICELLO	M74435	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
266.	GL-88-20	B111	NINE MILE POINT 1	M74436	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	07/94
267.	GL-88-20	B111	NINE MILE POINT 2	M74437	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	11/93
268.	GL-88-20	B111	NORTH ANNA 1	M74438	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
269.	GL-88-20	B111	NORTH ANNA 2	M74439	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
270.	GL-88-20	B111	OCONEE 1	M74440	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
271.	GL-88-20	B111	OCONEE 2	M74441	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
272.	GL-88-20	B111	OCONEE 3	M74442	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
273.	GL-88-20	B111	OYSTER CREEK 1	M74443	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
274.	GL-88-20	B111	PALISADES	M74444	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
275.	GL-88-20	B111	PALO VERDE 1	M74445	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
276.	GL-88-20	B111	PALO VERDE 2	M74446	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
277.	GL-88-20	B111	PALO VERDE 3	M74447	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	10/93
278.	GL-88-20	B111	PEACH BOTTOM 2	M74448	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
279.	GL-88-20	B111	PEACH BOTTOM 3	M74449	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
280.	GL-88-20	B111	PERRY 1	M74450	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/

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281.	GL-88-20	B111	PILGRIM 1	M74451	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/95
282.	GL-88-20	B111	POINT BEACH 1	M74452	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
283.	GL-88-20	B111	POINT BEACH 2	M74453	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
284.	GL-88-20	B111	PRAIRIE ISLAND 1	M74454	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
285.	GL-88-20	B111	PRAIRIE ISLAND 2	M74455	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
286.	GL-88-20	B111	QUAD CITIES 1	M74456	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
287.	GL-88-20	B111	QUAD CITIES 2	M74457	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
288.	GL-88-20	B111	RIVER BEND 1	M74459	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
289.	GL-88-20	B111	ROBINSON 2	M74460	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
290.	GL-88-20	B111	SALEM 1	M74461	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	03/94
291.	GL-88-20	B111	SALEM 2	M74462	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	03/94
292.	GL-88-20	B111	SAN ONOFRE 2	M74464	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
293.	GL-88-20	B111	SAN ONOFRE 3	M74465	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
294.	GL-88-20	B111	SEQUOYAH 1	M74468	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/94
295.	GL-88-20	B111	SEQUOYAH 2	M74469	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/94
296.	GL-88-20	B111	SOUTH TEXAS 1	M74471	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/94
297.	GL-88-20	B111	SOUTH TEXAS 2	M74472	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	08/94
298.	GL-88-20	B111	ST LUCIE 1	M74473	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
299.	GL-88-20	B111	ST LUCIE 2	M74474	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
300.	GL-88-20	B111	SUMMER 1	M74475	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
301.	GL-88-20	B111	SURRY 1	M74476	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
302.	GL-88-20	B111	SURRY 2	M74477	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
303.	GL-88-20	B111	SUSQUEHANNA 1	M74478	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
304.	GL-88-20	B111	SUSQUEHANNA 2	M74479	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
305.	GL-88-20	B111	THREE MILE ISLAND 1	M74480	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/94
306.	GL-88-20	B111	VERMONT YANKEE 1	M74484	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
307.	GL-88-20	B111	VOGTLE 1	M74485	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
308.	GL-88-20	B111	VOGTLE 2	M74486	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/93
309.	GL-88-20	B111	WASHINGTON NUCLEAR 2	M74489	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
310.	GL-88-20	B111	WATERFORD 3	M74487	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	/
311.	GL-88-20	B111	WOLF CREEK 1	M74490	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	12/94
312.	GL-88-20	B111	ZION 1	M74492	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
313.	GL-88-20	B111	ZION 2	M74493	INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	06/94
314.	GL-89-01	D025	BEAVER VALLEY 1	M86770	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
315.	GL-89-01	D025	BEAVER VALLEY 2	M86771	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93



316.	GL-89-01	D025	BROWNS FERRY 1	M83108	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
317.	GL-89-01	D025	BROWNS FERRY 2	M83109	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
318.	GL-89-01	D025	BROWNS FERRY 3	M83110	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
319.	GL-89-01	D025	BRUNSWICK 1	M67946	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
320.	GL-89-01	D025	BRUNSWICK 2	M67947	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
321.	GL-89-01	D025	FARLEY 1	M84009	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	01/94
322.	GL-89-01	D025	FARLEY 2	M84010	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	01/94
323.	GL-89-01	D025	NARRIS 1	M84127	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
324.	GL-89-01	D025	HATCH 1	M84635	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
325.	GL-89-01	D025	HATCH 2	M84636	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	12/93
326.	GL-89-01	D025	KEWAUNEE	M86417	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	11/93
327.	GL-89-01	D025	ST LUCIE 1	M85766	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	10/93
328.	GL-89-01	D025	ST LUCIE 2	M85767	RELOCATE RETS TO ADMIN. SECTION OF TECH SPECS (GL89-01)	10/93
329.	GL-89-04	A025	ARKANSAS 1	M74756	1ST REVIEWS AND SCHEDULES (GL 89-04)	11/93
330.	GL-89-04	A025	GINNA	M74767	1ST REVIEWS AND SCHEDULES (GL 89-04)	12/93
331.	GL-89-04	A025	NORTH ANNA 1	M74777	1ST REVIEWS AND SCHEDULES (GL 89-04)	10/94
332.	GL-89-04	A025	NORTH ANNA 2	M74778	1ST REVIEWS AND SCHEDULES (GL 89-04)	10/94
333.	GL-89-04	A025	OCONEE 1	M74779	1ST REVIEWS AND SCHEDULES (GL 89-04)	07/94
334.	GL-89-04	A025	OCONEE 2	M74780	1ST REVIEWS AND SCHEDULES (GL 89-04)	07/94
335.	GL-89-04	A025	OCONEE 3	M74781	1ST REVIEWS AND SCHEDULES (GL 89-04)	07/94
336.	GL-89-04	A025	PERRY 1	M74784	1ST REVIEWS AND SCHEDULES (GL 89-04)	04/94
337.	GL-89-04	A025	SALEM 1	M74790	1ST REVIEWS AND SCHEDULES (GL 89-04)	11/93
338.	GL-89-04	A025	SALEM 2	M74791	1ST REVIEWS AND SCHEDULES (GL 89-04)	11/93
339.	GL-89-06	F072	BROWNS FERRY 1	M73634	I.D.2 SAFETY PARAMETER DISPLAY SYSTEM (GL89-06)	07/97
340.	GL-89-06	F072	BROWNS FERRY 2	M73635	I.D.2 SAFETY PARAMETER DISPLAY SYSTEM (GL89-06)	10/93
341.	GL-89-06	F072	BROWNS FERRY 3	M73636	I.D.2 SAFETY PARAMETER DISPLAY SYSTEM (GL89-06)	06/95
342.	GL-89-06	F072	PALO VERDE 1	M73686	I.D.2 SAFETY PARAMETER DISPLAY SYSTEM (GL89-06)	11/93
343.	GL-89-06	F072	PALO VERDE 3	M73688	I.D.2 SAFETY PARAMETER DISPLAY SYSTEM (GL89-06)	04/94
344.	GL-89-08	L908	BROWNS FERRY 1	M73457	EROSION/CORROSION INDUCED PIPE WALL THINNING (GL89-08)(OLD B108)	07/97
345.	GL-89-08	L908	BROWNS FERRY 3	M73459	EROSION/CORROSION INDUCED PIPE WALL THINNING (GL89-08)(OLD B108)	06/95
346.	GL-89-10	B110	ARKANSAS 1	M75626	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
347.	GL-89-10	B110	ARKANSAS 2	M75627	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
348.	GL-89-10	B110	BEAVER VALLEY 1	M75628	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
349.	GL-89-10	B110	BEAVER VALLEY 2	M75629	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
350.	GL-89-10	B110	BIG ROCK POINT 1	M75632	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94

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351.	GL-89-10	B110	BRAIDWOOD 1	M75633	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
352.	GL-89-10	B110	BRAIDWOOD 2	M75634	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
353.	GL-89-10	B110	BROWNS FERRY 1	M75635	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	07/97
354.	GL-89-10	B110	BROWNS FERRY 2	M75636	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	05/95
355.	GL-89-10	B110	BROWNS FERRY 3	M75637	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/95
356.	GL-89-10	B110	BRUNSWICK 1	M75638	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
357.	GL-89-10	B110	BRUNSWICK 2	M75639	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
358.	GL-89-10	B110	BYRON 1	M75640	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
359.	GL-89-10	B110	BYRON 2	M75641	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
360.	GL-89-10	B110	CALLAWAY 1	M75642	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
361.	GL-89-10	B110	CALVERT CLIFFS 1	M75643	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	07/94
362.	GL-89-10	B110	CALVERT CLIFFS 2	M75644	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	07/94
363.	GL-89-10	B110	CATAMBA 1	M75645	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/98
364.	GL-89-10	B110	CATAMBA 2	M75646	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/98
365.	GL-89-10	B110	CLINTON 1	M75647	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
366.	GL-89-10	B110	COMANCHE PEAK 1	M75648	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
367.	GL-89-10	B110	COMANCHE PEAK 2	M75649	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
368.	GL-89-10	B110	COOK 1	M75650	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
369.	GL-89-10	B110	COOK 2	M75651	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
370.	GL-89-10	B110	CRYSTAL RIVER 3	M75653	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
371.	GL-89-10	B110	DAVIS-BESSE 1	M75654	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	11/94
372.	GL-89-10	B110	DIABLO CANYON 1	M75655	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
373.	GL-89-10	B110	DIABLO CANYON 2	M75656	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
374.	GL-89-10	B110	DRESDEN 2	M75657	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
375.	GL-89-10	B110	DRESDEN 3	M75658	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
376.	GL-89-10	B110	DUANE ARNOLD	M75659	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
377.	GL-89-10	B110	FARLEY 1	M75660	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
378.	GL-89-10	B110	FARLEY 2	M75661	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
379.	GL-89-10	B110	FERMI 2	M75662	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
380.	GL-89-10	B110	FITZPATRICK	M75663	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
381.	GL-89-10	B110	FORT CALHOUN 1	M75664	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
382.	GL-89-10	B110	GINNA	M75665	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
383.	GL-89-10	B110	GRAND GULF 1	M75666	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
384.	GL-89-10	B110	HADDAM NECK	M75667	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	02/96
385.	GL-89-10	B110	HARRIS 1	M75668	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94

386.	GL-89-10	B110	HATCH 1	M75669	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/95
387.	GL-89-10	B110	HATCH 2	M75670	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/96
388.	GL-89-10	B110	HOPE CREEK 1	M75671	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
389.	GL-89-10	B110	INDIAN POINT 2	M75672	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
390.	GL-89-10	B110	INDIAN POINT 3	M75673	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
391.	GL-89-10	B110	KEMALWEE	M75674	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
392.	GL-89-10	B110	LASALLE 1	M75675	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
393.	GL-89-10	B110	LASALLE 2	M75676	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
394.	GL-89-10	B110	LIMERICK 1	M75677	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
395.	GL-89-10	B110	LIMERICK 2	M75678	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/95
396.	GL-89-10	B110	MAINE YANKEE	M75679	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
397.	GL-89-10	B110	MCGUIRE 1	M75680	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/97
398.	GL-89-10	B110	MCGUIRE 2	M75681	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/97
399.	GL-89-10	B110	MILLSTONE 1	M75682	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/95
400.	GL-89-10	B110	MILLSTONE 2	M75683	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
401.	GL-89-10	B110	MILLSTONE 3	M75684	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	01/94
402.	GL-89-10	B110	MONTICELLO	M75685	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
403.	GL-89-10	B110	NINE MILE POINT 1	M75686	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/97
404.	GL-89-10	B110	NINE MILE POINT 2	M75687	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
405.	GL-89-10	B110	NORTH ANNA 1	M75688	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
406.	GL-89-10	B110	NORTH ANNA 2	M75689	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
407.	GL-89-10	B110	OCONEE 1	M75690	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/98
408.	GL-89-10	B110	OCONEE 2	M75691	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/98
409.	GL-89-10	B110	OCONEE 3	M75692	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/98
410.	GL-89-10	B110	OYSTER CREEK 1	M75693	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
411.	GL-89-10	B110	PALISADES	M75694	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
412.	GL-89-10	B110	PALO VERDE 1	M75695	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
413.	GL-89-10	B110	PALO VERDE 2	M75696	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
414.	GL-89-10	B110	PALO VERDE 3	M75697	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
415.	GL-89-10	B110	PEACH BOTTOM 2	M75698	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
416.	GL-89-10	B110	PEACH BOTTOM 3	M75699	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
417.	GL-89-10	B110	PERRY 1	M75700	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
418.	GL-89-10	B110	PILGRIM 1	M75701	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/95
419.	GL-89-10	B110	POINT BEACH 1	M75702	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
420.	GL-89-10	B110	POINT BEACH 2	M75703	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94

421.	GL-89-10	B110	PRAIRIE ISLAND 1	M75704	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
422.	GL-89-10	B110	PRAIRIE ISLAND 2	M75705	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
423.	GL-89-10	B110	QUAD CITIES 1	M75706	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
424.	GL-89-10	B110	QUAD CITIES 2	M75707	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
425.	GL-89-10	B110	RIVER BEND 1	M75708	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
426.	GL-89-10	B110	ROBINSON 2	M75709	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
427.	GL-89-10	B110	SALEM 1	M75710	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	05/95
428.	GL-89-10	B110	SALEM 2	M75711	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	11/94
429.	GL-89-10	B110	SAN ONOFRE 2	M75713	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
430.	GL-89-10	B110	SAN ONOFRE 3	M75714	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
431.	GL-89-10	B110	SEABROOK 1	M75715	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
432.	GL-89-10	B110	SEQUOYAH 1	M75716	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	03/95
433.	GL-89-10	B110	SEQUOYAH 2	M75717	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	03/95
434.	GL-89-10	B110	SOUTH TEXAS 1	M75719	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
435.	GL-89-10	B110	SOUTH TEXAS 2	M75720	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
436.	GL-89-10	B110	ST LUCIE 1	M75721	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
437.	GL-89-10	B110	ST LUCIE 2	M75722	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
438.	GL-89-10	B110	SUMNER 1	M75723	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
439.	GL-89-10	B110	SURRY 1	M75724	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
440.	GL-89-10	B110	SURRY 2	M75725	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
441.	GL-89-10	B110	SUSQUEHANNA 1	M75726	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
442.	GL-89-10	B110	SUSQUEHANNA 2	M75727	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
443.	GL-89-10	B110	THREE MILE ISLAND 1	M75728	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
444.	GL-89-10	B110	TURKEY POINT 3	M75730	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
445.	GL-89-10	B110	TURKEY POINT 4	M75731	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
446.	GL-89-10	B110	VERMONT YANKEE 1	M75732	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
447.	GL-89-10	B110	VOGTLE 1	M75733	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/95
448.	GL-89-10	B110	VOGTLE 2	M75734	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/95
449.	GL-89-10	B110	WASHINGTON NUCLEAR 2	M75738	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
450.	GL-89-10	B110	WATERFORD 3	M75735	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
451.	GL-89-10	B110	WOLF CREEK 1	M75739	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	12/94
452.	GL-89-10	B110	ZION 1	M75741	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
453.	GL-89-10	B110	ZION 2	M75742	MOTOR OPERATED VALVED TESTING AND SURVEILLANCE (GL 89-10)	06/94
454.	GL-89-14	D026	QUAD CITIES 1	M84319	ELIMINATION OF 3.25 REQUIREMENT IN TECH SPEC 4.0.2 (GL89-14)	/
455.	GL-89-14	D026	QUAD CITIES 2	M84320	ELIMINATION OF 3.25 REQUIREMENT IN TECH SPEC 4.0.2 (GL89-14)	/

456.	GL-89-16	B112	BROWNS FERRY 1	M74858	INSTALLATION OF HARDENED WETWELL VENT (GL 89-16)	07/97
457.	GL-89-16	B112	BROWNS FERRY 3	M74860	INSTALLATION OF HARDENED WETWELL VENT (GL 89-16)	06/95
458.	GL-89-16	B112	MILLSTONE 1	M74872	INSTALLATION OF HARDENED WETWELL VENT (GL 89-16)	02/94
459.	GL-89-16	B112	PEACH BOTTOM 3	M74877	INSTALLATION OF HARDENED WETWELL VENT (GL 89-16)	12/93
460.	GL-90-09	D028	GINNA	M83570	Visual Inspection Frequency for Snubbers (GL-90-09)	12/93
461.	GL-91-01	D029	SAN ONOFRE 3	M84517	Removal of W/D Schedule for RV Material Specimens (GL-91-01)	/
462.	GL-91-04	D031	PEACH BOTTOM 2	M83704	TS SURVEILLANCE INTERVAL REQUIREMENTS FOR 24 MO CYCLE (GL91-04)	10/93
463.	GL-91-04	D031	PEACH BOTTOM 3	M83705	TS SURVEILLANCE INTERVAL REQUIREMENTS FOR 24 MO CYCLE (GL91-04)	10/93
464.	GL-91-04	D031	PILGRIM 1	M83787	TS SURVEILLANCE INTERVAL REQUIREMENTS FOR 24 MO CYCLE (GL91-04)	03/94
465.	GL-91-08	D030	CALVERT CLIFFS 2	M87559	Removal of Component Lists from Tech Spec	02/94
466.	GL-91-08	D030	GINNA	M77849	Removal of Component Lists from Tech Spec	01/94
467.	GL-91-11	L111	CALLAWAY 1	M82391	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	/
468.	GL-91-11	L111	GINNA	M82414	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	12/93
469.	GL-91-11	L111	HATCH 1	M82418	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	12/94
470.	GL-91-11	L111	HATCH 2	M82419	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	12/94
471.	GL-91-11	L111	KEWAUNEE	M82423	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	11/93
472.	GL-91-11	L111	MCGUIRE 1	M82429	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	12/93
473.	GL-91-11	L111	MCGUIRE 2	M82430	VITAL INSTRUMENT BUSES & TIE BREAKERS (GI 48, GI 49)	12/93
474.	GL-91-13	B119	BRAIDWOOD 1	M81167	ESSENTIAL SERVICE WATER SYSTEM FAILURES (GSI 130)	10/93
475.	GL-91-13	B119	BRAIDWOOD 2	M81168	ESSENTIAL SERVICE WATER SYSTEM FAILURES (GSI 130)	10/93
476.	GL-92-01	B120	ARKANSAS 1	M83730	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	03/94
477.	GL-92-01	B120	ARKANSAS 2	M83430	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
478.	GL-92-01	B120	BEAVER VALLEY 1	M83431	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
479.	GL-92-01	B120	BEAVER VALLEY 2	M83432	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
480.	GL-92-01	B120	BIG ROCK POINT 1	M83435	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
481.	GL-92-01	B120	BRAIDWOOD 1	M83436	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
482.	GL-92-01	B120	BRAIDWOOD 2	M83437	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
483.	GL-92-01	B120	BROWNS FERRY 1	M83438	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
484.	GL-92-01	B120	BROWNS FERRY 2	M83439	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
485.	GL-92-01	B120	BROWNS FERRY 3	M83440	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
486.	GL-92-01	B120	BRUNSWICK 1	M83441	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
487.	GL-92-01	B120	BRUNSWICK 2	M83442	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
488.	GL-92-01	B120	BYRON 1	M83443	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
489.	GL-92-01	B120	BYRON 2	M83444	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
490.	GL-92-01	B120	CALLAWAY 1	M83445	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93

491.	GL-92-01	B120	CALVERT CLIFFS 1	M83446	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
492.	GL-92-01	B120	CALVERT CLIFFS 2	M83447	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
493.	GL-92-01	B120	CATAMBA 1	M83448	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
494.	GL-92-01	B120	CATAMBA 2	M83449	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
495.	GL-92-01	B120	CLINTON 1	M83450	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
496.	GL-92-01	B120	COMANCHE PEAK 1	M83451	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
497.	GL-92-01	B120	COMANCHE PEAK 2	M83452	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
498.	GL-92-01	B120	COOK 1	M83453	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
499.	GL-92-01	B120	COOK 2	M83454	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
500.	GL-92-01	B120	COOPER STATION	M83455	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
501.	GL-92-01	B120	CRYSTAL RIVER 3	M83731	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
502.	GL-92-01	B120	DAVIS-BESSE 1	M83732	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/94
503.	GL-92-01	B120	DIABLO CANYON 1	M83456	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
504.	GL-92-01	B120	DIABLO CANYON 2	M83457	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
505.	GL-92-01	B120	DRESDEN 2	M83458	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
506.	GL-92-01	B120	DRESDEN 3	M83459	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
507.	GL-92-01	B120	DJANE ARNOLD	M83460	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
508.	GL-92-01	B120	FARLEY 1	M83461	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
509.	GL-92-01	B120	FARLEY 2	M83462	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
510.	GL-92-01	B120	FERMI 2	M83463	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
511.	GL-92-01	B120	FITZPATRICK	M83464	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
512.	GL-92-01	B120	FORT CALHOUN 1	M83465	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
513.	GL-92-01	B120	GINNA	M83733	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
514.	GL-92-01	B120	GRAND GULF 1	M83466	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
515.	GL-92-01	B120	HADDAM NECK	M83467	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
516.	GL-92-01	B120	HARRIS 1	M83468	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
517.	GL-92-01	B120	HATCH 1	M83469	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
518.	GL-92-01	B120	HATCH 2	M83470	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/94
519.	GL-92-01	B120	HOPE CREEK 1	M83471	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
520.	GL-92-01	B120	INDIAN POINT 2	M83472	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
521.	GL-92-01	B120	INDIAN POINT 3	M83473	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
522.	GL-92-01	B120	KEWAUNEE	M83474	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
523.	GL-92-01	B120	LASALLE 1	M83475	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
524.	GL-92-01	B120	LASALLE 2	M83476	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
525.	GL-92-01	B120	LIMERICK 1	M83477	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93

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526.	GL-92-01	B120	LIMERICK 2	M83478	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
527.	GL-92-01	B120	MAINE YANKEE	M83479	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	06/94
528.	GL-92-01	B120	MCGUIRE 1	M83480	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
529.	GL-92-01	B120	MCGUIRE 2	M83481	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
530.	GL-92-01	B120	MILLSTONE 1	M83482	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
531.	GL-92-01	B120	MILLSTONE 2	M83483	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
532.	GL-92-01	B120	MILLSTONE 3	M83484	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
533.	GL-92-01	B120	MONTICELLO	M83485	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
534.	GL-92-01	B120	NINE MILE POINT 1	M83486	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
535.	GL-92-01	B120	NINE MILE POINT 2	M83487	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
536.	GL-92-01	B120	NORTH ANNA 1	M83488	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
537.	GL-92-01	B120	NORTH ANNA 2	M83489	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
538.	GL-92-01	B120	OCONEE 1	M83734	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
539.	GL-92-01	B120	OCONEE 2	M83735	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
540.	GL-92-01	B120	OCONEE 3	M83736	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
541.	GL-92-01	B120	OYSTER CREEK 1	M83490	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
542.	GL-92-01	B120	PALISADES	M83491	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
543.	GL-92-01	B120	PALO VERDE 1	M83492	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
544.	GL-92-01	B120	PALO VERDE 2	M83493	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
545.	GL-92-01	B120	PALO VERDE 3	M83494	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
546.	GL-92-01	B120	PEACH BOTTOM 2	M83495	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
547.	GL-92-01	B120	PEACH BOTTOM 3	M83496	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
548.	GL-92-01	B120	PERRY 1	M83497	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
549.	GL-92-01	B120	PILGRIM 1	M83498	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
550.	GL-92-01	B120	POINT BEACH 1	M83737	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	03/94
551.	GL-92-01	B120	POINT BEACH 2	M83738	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	03/94
552.	GL-92-01	B120	PRAIRIE ISLAND 1	M83499	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
553.	GL-92-01	B120	PRAIRIE ISLAND 2	M83500	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
554.	GL-92-01	B120	QUAD CITIES 1	M83501	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
555.	GL-92-01	B120	QUAD CITIES 2	M83502	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
556.	GL-92-01	B120	RIVER BEND 1	M83503	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
557.	GL-92-01	B120	ROBINSON 2	M83504	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
558.	GL-92-01	B120	SALEM 1	M83507	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
559.	GL-92-01	B120	SALEM 2	M83508	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	10/94
560.	GL-92-01	B120	SAN ONOFRE 2	M83510	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93

561.	GL-92-01	B120	SAN ONOFRE 3	N83511	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
562.	GL-92-01	B120	SEABROOK 1	N83512	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
563.	GL-92-01	B120	SEQUOYAH 1	N83513	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/94
564.	GL-92-01	B120	SEQUOYAH 2	N83514	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/94
565.	GL-92-01	B120	SOUTH TEXAS 1	N83515	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
566.	GL-92-01	B120	SOUTH TEXAS 2	N83516	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
567.	GL-92-01	B120	ST LUCIE 1	N83505	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
568.	GL-92-01	B120	ST LUCIE 2	N83506	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
569.	GL-92-01	B120	SUNNER 1	N83517	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
570.	GL-92-01	B120	SURRY 1	N83739	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
571.	GL-92-01	B120	SURRY 2	N83740	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
572.	GL-92-01	B120	SUSQUEHANNA 1	N83518	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
573.	GL-92-01	B120	SUSQUEHANNA 2	N83519	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
574.	GL-92-01	B120	THREE MILE ISLAND 1	N83741	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
575.	GL-92-01	B120	TURKEY POINT 3	N83742	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
576.	GL-92-01	B120	TURKEY POINT 4	N83743	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
577.	GL-92-01	B120	VERMONT YANKEE 1	N83521	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
578.	GL-92-01	B120	VOGTLE 1	N83522	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
579.	GL-92-01	B120	VOGTLE 2	N83523	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	01/94
580.	GL-92-01	B120	WASHINGTON NUCLEAR 2	N83527	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
581.	GL-92-01	B120	WATERFORD 3	N83524	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
582.	GL-92-01	B120	WOLF CREEK 1	N83528	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
583.	GL-92-01	B120	ZION 1	N83744	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
584.	GL-92-01	B120	ZION 2	N83745	REACTOR VESSEL STRUCTURAL INTEGRITY (GL 92-01)	12/93
585.	GL-92-04	B121	COOPER STATION	N84275	BWR LEVEL INSTRUMENTATION (GL-92-04)	12/93
586.	GL-92-04	B121	HATCH 1	N84282	BWR LEVEL INSTRUMENTATION (GL-92-04)	12/93
587.	GL-92-04	B121	HATCH 2	N84283	BWR LEVEL INSTRUMENTATION (GL-92-04)	12/93
588.	GL-92-04	B121	LASALLE 1	N84285	BWR LEVEL INSTRUMENTATION (GL-92-04)	/
589.	GL-92-04	B121	LASALLE 2	N84286	BWR LEVEL INSTRUMENTATION (GL-92-04)	/
590.	GL-92-04	B121	LIMERICK 2	N84288	BWR LEVEL INSTRUMENTATION (GL-92-04)	01/94
591.	GL-92-04	B121	PERRY 1	N84296	BWR LEVEL INSTRUMENTATION (GL-92-04)	/
592.	GL-92-04	B121	SUSQUEHANNA 1	N84301	BWR LEVEL INSTRUMENTATION (GL-92-04)	01/94
593.	GL-92-04	B121	SUSQUEHANNA 2	N84302	BWR LEVEL INSTRUMENTATION (GL-92-04)	01/94
594.	GL-92-04	B121	VERMONT YANKEE 1	N84303	BWR LEVEL INSTRUMENTATION (GL-92-04)	11/93
595.	GL-92-08	L208	ARKANSAS 2	N85515	THERMO-LAG (GENERIC LETTER 92-08)	06/94



596.	GL-92-08	L208	BEAVER VALLEY 1	M85516	THERMO-LAG (GENERIC LETTER 92-08)	12/93
597.	GL-92-08	L208	BEAVER VALLEY 2	M85517	THERMO-LAG (GENERIC LETTER 92-08)	12/93
598.	GL-92-08	L208	BRAIDWOOD 1	M85521	THERMO-LAG (GENERIC LETTER 92-08)	/
599.	GL-92-08	L208	BRAIDWOOD 2	M85522	THERMO-LAG (GENERIC LETTER 92-08)	/
600.	GL-92-08	L208	BROWNS FERRY 1	M85523	THERMO-LAG (GENERIC LETTER 92-08)	11/93
601.	GL-92-08	L208	BROWNS FERRY 2	M85524	THERMO-LAG (GENERIC LETTER 92-08)	11/93
602.	GL-92-08	L208	BROWNS FERRY 3	M85525	THERMO-LAG (GENERIC LETTER 92-08)	11/93
603.	GL-92-08	L208	BRUNSWICK 1	M85526	THERMO-LAG (GENERIC LETTER 92-08)	03/95
604.	GL-92-08	L208	BRUNSWICK 2	M85527	THERMO-LAG (GENERIC LETTER 92-08)	03/95
605.	GL-92-08	L208	BYRON 1	M85528	THERMO-LAG (GENERIC LETTER 92-08)	/
606.	GL-92-08	L208	BYRON 2	M85529	THERMO-LAG (GENERIC LETTER 92-08)	/
607.	GL-92-08	L208	CALLAWAY 1	M85530	THERMO-LAG (GENERIC LETTER 92-08)	/
608.	GL-92-08	L208	CLINTON 1	M85535	THERMO-LAG (GENERIC LETTER 92-08)	/
609.	GL-92-08	L208	COMANCHE PEAK 1	M85536	THERMO-LAG (GENERIC LETTER 92-08)	12/93
610.	GL-92-08	L208	COOK 1	M85538	THERMO-LAG (GENERIC LETTER 92-08)	03/94
611.	GL-92-08	L208	COOK 2	M85539	THERMO-LAG (GENERIC LETTER 92-08)	03/94
612.	GL-92-08	L208	COOPER STATION	M85540	THERMO-LAG (GENERIC LETTER 92-08)	12/93
613.	GL-92-08	L208	CRYSTAL RIVER 3	M85541	THERMO-LAG (GENERIC LETTER 92-08)	12/93
614.	GL-92-08	L208	DAVIS-BESSE 1	M85542	THERMO-LAG (GENERIC LETTER 92-08)	12/95
615.	GL-92-08	L208	DIABLO CANYON 1	M85543	THERMO-LAG (GENERIC LETTER 92-08)	/
616.	GL-92-08	L208	DIABLO CANYON 2	M85544	THERMO-LAG (GENERIC LETTER 92-08)	/
617.	GL-92-08	L208	DUANE ARNOLD	M85547	THERMO-LAG (GENERIC LETTER 92-08)	/
618.	GL-92-08	L208	FERMI 2	M85550	THERMO-LAG (GENERIC LETTER 92-08)	06/94
619.	GL-92-08	L208	GRAND GULF 1	M85554	THERMO-LAG (GENERIC LETTER 92-08)	12/94
620.	GL-92-08	L208	HADDAM NECK	M85555	THERMO-LAG (GENERIC LETTER 92-08)	06/94
621.	GL-92-08	L208	HARRIS 1	M85556	THERMO-LAG (GENERIC LETTER 92-08)	06/94
622.	GL-92-08	L208	HATCH 1	M85557	THERMO-LAG (GENERIC LETTER 92-08)	12/95
623.	GL-92-08	L208	HATCH 2	M85558	THERMO-LAG (GENERIC LETTER 92-08)	12/95
624.	GL-92-08	L208	INDIAN POINT 2	M85560	THERMO-LAG (GENERIC LETTER 92-08)	12/93
625.	GL-92-08	L208	LASALLE 1	M85563	THERMO-LAG (GENERIC LETTER 92-08)	/
626.	GL-92-08	L208	LASALLE 2	M85564	THERMO-LAG (GENERIC LETTER 92-08)	/
627.	GL-92-08	L208	LIMERICK 1	M85565	THERMO-LAG (GENERIC LETTER 92-08)	01/94
628.	GL-92-08	L208	LIMERICK 2	M85566	THERMO-LAG (GENERIC LETTER 92-08)	01/95
629.	GL-92-08	L208	MAINE YANKEE	M85567	THERMO-LAG (GENERIC LETTER 92-08)	12/93
630.	GL-92-08	L208	MILLSTONE 1	M85570	THERMO-LAG (GENERIC LETTER 92-08)	06/94

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631.	GL-92-08	L208	MILLSTONE 2	M85571	THERMO-LAG (GENERIC LETTER 92-08)	06/94
632.	GL-92-08	L208	MILLSTONE 3	M85572	THERMO-LAG (GENERIC LETTER 92-08)	12/93
633.	GL-92-08	L208	NINE MILE POINT 1	M85574	THERMO-LAG (GENERIC LETTER 92-08)	12/93
634.	GL-92-08	L208	NINE MILE POINT 2	M85575	THERMO-LAG (GENERIC LETTER 92-08)	12/93
635.	GL-92-08	L208	NORTH ANNA 1	M85576	THERMO-LAG (GENERIC LETTER 92-08)	12/93
636.	GL-92-08	L208	NORTH ANNA 2	M85577	THERMO-LAG (GENERIC LETTER 92-08)	12/93
637.	GL-92-08	L208	OYSTER CREEK 1	M85581	THERMO-LAG (GENERIC LETTER 92-08)	04/94
638.	GL-92-08	L208	PALISADES	M85582	THERMO-LAG (GENERIC LETTER 92-08)	/
639.	GL-92-08	L208	PALO VERDE 1	M85583	THERMO-LAG (GENERIC LETTER 92-08)	/
640.	GL-92-08	L208	PALO VERDE 2	M85584	THERMO-LAG (GENERIC LETTER 92-08)	/
641.	GL-92-08	L208	PALO VERDE 3	M85585	THERMO-LAG (GENERIC LETTER 92-08)	/
642.	GL-92-08	L208	PEACH BOTTOM 2	M85586	THERMO-LAG (GENERIC LETTER 92-08)	12/94
643.	GL-92-08	L208	PEACH BOTTOM 3	M85587	THERMO-LAG (GENERIC LETTER 92-08)	12/94
644.	GL-92-08	L208	PERRY 1	M85588	THERMO-LAG (GENERIC LETTER 92-08)	/
645.	GL-92-08	L208	POINT BEACH 1	M85590	THERMO-LAG (GENERIC LETTER 92-08)	/
646.	GL-92-08	L208	POINT BEACH 2	M85591	THERMO-LAG (GENERIC LETTER 92-08)	/
647.	GL-92-08	L208	PRAIRIE ISLAND 1	M85592	THERMO-LAG (GENERIC LETTER 92-08)	/
648.	GL-92-08	L208	PRAIRIE ISLAND 2	M85593	THERMO-LAG (GENERIC LETTER 92-08)	/
649.	GL-92-08	L208	RIVER BEND 1	M85596	THERMO-LAG (GENERIC LETTER 92-08)	/
650.	GL-92-08	L208	SAN ONOFRE 2	M85601	THERMO-LAG (GENERIC LETTER 92-08)	/
651.	GL-92-08	L208	SAN ONOFRE 3	M85602	THERMO-LAG (GENERIC LETTER 92-08)	/
652.	GL-92-08	L208	SEQUOYAH 1	M85604	THERMO-LAG (GENERIC LETTER 92-08)	01/94
653.	GL-92-08	L208	SEQUOYAH 2	M85605	THERMO-LAG (GENERIC LETTER 92-08)	01/94
654.	GL-92-08	L208	SOUTH TEXAS 1	M85606	THERMO-LAG (GENERIC LETTER 92-08)	06/94
655.	GL-92-08	L208	SOUTH TEXAS 2	M85607	THERMO-LAG (GENERIC LETTER 92-08)	06/94
656.	GL-92-08	L208	ST LUCIE 1	M85608	THERMO-LAG (GENERIC LETTER 92-08)	12/93
657.	GL-92-08	L208	ST LUCIE 2	M85609	THERMO-LAG (GENERIC LETTER 92-08)	12/93
658.	GL-92-08	L208	SUMMER 1	M85610	THERMO-LAG (GENERIC LETTER 92-08)	10/93
659.	GL-92-08	L208	SURRY 1	M85611	THERMO-LAG (GENERIC LETTER 92-08)	06/94
660.	GL-92-08	L208	SURRY 2	M85612	THERMO-LAG (GENERIC LETTER 92-08)	06/94
661.	GL-92-08	L208	SUSQUEHANNA 1	M85613	THERMO-LAG (GENERIC LETTER 92-08)	12/95
662.	GL-92-08	L208	SUSQUEHANNA 2	M85614	THERMO-LAG (GENERIC LETTER 92-08)	12/94
663.	GL-92-08	L208	THREE MILE ISLAND 1	M85615	THERMO-LAG (GENERIC LETTER 92-08)	12/94
664.	GL-92-08	L208	TURKEY POINT 3	M85616	THERMO-LAG (GENERIC LETTER 92-08)	12/93
665.	GL-92-08	L208	TURKEY POINT 4	M85617	THERMO-LAG (GENERIC LETTER 92-08)	12/93

666.	GL-92-08	L208	VERMONT YANKEE 1	N85618	THERMO-LAG (GENERIC LETTER 92-08)	12/93
667.	GL-92-08	L208	VOGTLE 1	N85619	THERMO-LAG (GENERIC LETTER 92-08)	12/94
668.	GL-92-08	L208	VOGTLE 2	N85620	THERMO-LAG (GENERIC LETTER 92-08)	12/94
669.	GL-92-08	L208	WASHINGTON NUCLEAR 2	N85624	THERMO-LAG (GENERIC LETTER 92-08)	/
670.	GL-92-08	L208	WATERFORD 3	N85621	THERMO-LAG (GENERIC LETTER 92-08)	/
671.	GL-92-08	L208	WOLF CREEK 1	N85625	THERMO-LAG (GENERIC LETTER 92-08)	/
672.	GL-92-08	L208	ZION 1	N85626	THERMO-LAG (GENERIC LETTER 92-08)	/
673.	GL-92-08	L208	ZION 2	N85627	THERMO-LAG (GENERIC LETTER 92-08)	/
674.	GL-93-04	L304	BEAVER VALLEY 1	N86831	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	12/93
675.	GL-93-04	L304	BEAVER VALLEY 2	N86832	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	12/93
676.	GL-93-04	L304	BRAIDWOOD 1	N86833	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
677.	GL-93-04	L304	BRAIDWOOD 2	N86834	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
678.	GL-93-04	L304	BYRON 1	N86835	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
679.	GL-93-04	L304	BYRON 2	N86836	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
680.	GL-93-04	L304	CALLAWAY 1	N86837	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
681.	GL-93-04	L304	CATAMBA 1	N86838	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
682.	GL-93-04	L304	CATAMBA 2	N86839	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
683.	GL-93-04	L304	COMANCHE PEAK 1	N86840	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
684.	GL-93-04	L304	COMANCHE PEAK 2	N86841	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	12/93
685.	GL-93-04	L304	COOK 1	N86842	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
686.	GL-93-04	L304	COOK 2	N86843	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
687.	GL-93-04	L304	DIABLO CANYON 1	N86844	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
688.	GL-93-04	L304	DIABLO CANYON 2	N86845	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
689.	GL-93-04	L304	FARLEY 1	N86846	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
690.	GL-93-04	L304	FARLEY 2	N86847	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
691.	GL-93-04	L304	GINNA	N86848	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
692.	GL-93-04	L304	HARRIS 1	N86849	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
693.	GL-93-04	L304	INDIAN POINT 2	N86850	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
694.	GL-93-04	L304	INDIAN POINT 3	N86851	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
695.	GL-93-04	L304	KEMUNEE	N86852	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
696.	GL-93-04	L304	MCGUIRE 1	N86853	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
697.	GL-93-04	L304	MCGUIRE 2	N86854	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
698.	GL-93-04	L304	MILLSTONE 3	N86855	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
699.	GL-93-04	L304	NORTH ANNA 1	N86856	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	12/93
700.	GL-93-04	L304	NORTH ANNA 2	N86857	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	12/93

701.	GL-93-04	L304	POINT BEACH 1	M86858	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
702.	GL-93-04	L304	POINT BEACH 2	M86859	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
703.	GL-93-04	L304	PRAIRIE ISLAND 1	M86860	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
704.	GL-93-04	L304	PRAIRIE ISLAND 2	M86861	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
705.	GL-93-04	L304	ROBINSON 2	M86862	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	12/93
706.	GL-93-04	L304	SALEM 1	M86863	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
707.	GL-93-04	L304	SALEM 2	M86864	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
708.	GL-93-04	L304	SEABROOK 1	M86865	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
709.	GL-93-04	L304	SEQUOYAH 1	M86866	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
710.	GL-93-04	L304	SEQUOYAH 2	M86867	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
711.	GL-93-04	L304	SOUTH TEXAS 1	M86868	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
712.	GL-93-04	L304	SOUTH TEXAS 2	M86869	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
713.	GL-93-04	L304	SUMMER 1	M86870	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
714.	GL-93-04	L304	SURRY 1	M86871	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
715.	GL-93-04	L304	SURRY 2	M86872	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	/
716.	GL-93-04	L304	TURKEY POINT 3	M86873	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
717.	GL-93-04	L304	TURKEY POINT 4	M86874	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
718.	GL-93-04	L304	VOGTLE 1	M86875	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
719.	GL-93-04	L304	VOGTLE 2	M86876	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
720.	GL-93-04	L304	WOLF CREEK 1	M86878	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
721.	GL-93-04	L304	ZION 1	M86880	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
722.	GL-93-04	L304	ZION 2	M86881	ROD CONTROL SYSTEM FAILURE & WITHDRAWAL OF RCCA'S (GL 93-04)	03/94
723.	MPA-A004	A004	BROWNS FERRY 1	M08715	APPENDIX J - CONTAINMENT LEAK TESTING	07/97
724.	MPA-A004	A004	BROWNS FERRY 3	M08717	APPENDIX J - CONTAINMENT LEAK TESTING	06/95
725.	MPA-B032	B032	HADDAM NECK	M49425	BLOCKED SI SIGNAL DURING COOLDOWN	/
726.	MPA-B041	B041	BROWNS FERRY 1	M48134	FIRE PROTECTION - FINAL TECH SPECS (INCLUDES SER SUPPLEMENTS)	07/97
727.	MPA-B041	B041	BROWNS FERRY 3	M48136	FIRE PROTECTION - FINAL TECH SPECS (INCLUDES SER SUPPLEMENTS)	06/95
728.	MPA-B116	B116	FERMI 2	M77775	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	12/93
729.	MPA-B116	B116	HATCH 1	M77778	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	12/95
730.	MPA-B116	B116	HATCH 2	M77779	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	12/96
731.	MPA-B116	B116	LASALLE 2	M77782	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	10/93
732.	MPA-B116	B116	OYSTER CREEK 1	M77789	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	06/94
733.	MPA-B116	B116	VERMONT YANKEE 1	M77800	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	06/94
734.	MPA-B116	B116	VOGTLE 1	M85210	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	09/95
735.	MPA-B116	B116	VOGTLE 2	M85211	SUPP 3, NRC SPONSORED TESTS OF MOTOR-OPERATED VALVES (GL89-10)	09/95

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736.	MPA-B117	B117	CALLAWAY 1	M81598	SUPP 2 - FAILURE OF WESTINGHOUSE SG TUBE MECHANICAL PLUGS	/
737.	MPA-B117	B117	GINNA	M81622	SUPP 2 - FAILURE OF WESTINGHOUSE SG TUBE MECHANICAL PLUGS	12/98
738.	MPA-B117	B117	MILLSTONE 3	M81636	SUPP 2 - FAILURE OF WESTINGHOUSE SG TUBE MECHANICAL PLUGS	12/94
739.	MPA-B117	B117	ZION 1	M81680	SUPP 2 - FAILURE OF WESTINGHOUSE SG TUBE MECHANICAL PLUGS	/
740.	MPA-B117	B117	ZION 2	M81681	SUPP 2 - FAILURE OF WESTINGHOUSE SG TUBE MECHANICAL PLUGS	/
741.	MPA-B118	B118	ARKANSAS 1	M83588	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
742.	MPA-B118	B118	ARKANSAS 2	M83589	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
743.	MPA-B118	B118	BEAVER VALLEY 1	M83590	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/97
744.	MPA-B118	B118	BEAVER VALLEY 2	M83591	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	07/99
745.	MPA-B118	B118	BIG ROCK POINT 1	M83592	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	05/95
746.	MPA-B118	B118	BRAIDWOOD 1	M83593	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
747.	MPA-B118	B118	BRAIDWOOD 2	M83594	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
748.	MPA-B118	B118	BROWNS FERRY 1	M83595	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	07/97
749.	MPA-B118	B118	BROWNS FERRY 2	M83596	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	07/96
750.	MPA-B118	B118	BROWNS FERRY 3	M83597	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	07/96
751.	MPA-B118	B118	BRUNSWICK 1	M83598	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
752.	MPA-B118	B118	BRUNSWICK 2	M83599	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
753.	MPA-B118	B118	BYRON 1	M83600	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
754.	MPA-B118	B118	BYRON 2	M83601	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
755.	MPA-B118	B118	CALLAWAY 1	M83602	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
756.	MPA-B118	B118	CALVERT CLIFFS 1	M83603	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
757.	MPA-B118	B118	CALVERT CLIFFS 2	M83604	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
758.	MPA-B118	B118	CATAMBA 1	M83605	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
759.	MPA-B118	B118	CATAMBA 2	M83606	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
760.	MPA-B118	B118	CLINTON 1	M83607	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
761.	MPA-B118	B118	COMANCHE PEAK 1	M83608	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
762.	MPA-B118	B118	COOK 1	M83609	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/93
763.	MPA-B118	B118	COOK 2	M83610	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/93
764.	MPA-B118	B118	COOPER STATION	M83611	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
765.	MPA-B118	B118	CRYSTAL RIVER 3	M83612	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
766.	MPA-B118	B118	DAVIS-BESSE 1	M83613	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	09/95
767.	MPA-B118	B118	DIABLO CANYON 1	M83614	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	01/96
768.	MPA-B118	B118	DIABLO CANYON 2	M83615	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	01/96
769.	MPA-B118	B118	DRESDEN 2	M83616	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
770.	MPA-B118	B118	DRESDEN 3	M83617	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/

771.	MPA-B118	B118	DUANE ARNOLD	M83618	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
772.	MPA-B118	B118	FARLEY 1	M83619	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/95
773.	MPA-B118	B118	FARLEY 2	M83620	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/95
774.	MPA-B118	B118	FERMI 2	M83621	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/95
775.	MPA-B118	B118	FITZPATRICK	M83622	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
776.	MPA-B118	B118	GINNA	M83624	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	05/95
777.	MPA-B118	B118	GRAND GULF 1	M83625	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
778.	MPA-B118	B118	HADDAM NECK	M83626	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
779.	MPA-B118	B118	HARRIS 1	M83627	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/96
780.	MPA-B118	B118	HATCH 1	M83628	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
781.	MPA-B118	B118	HATCH 2	M83629	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/95
782.	MPA-B118	B118	HOPE CREEK 1	M83630	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	02/96
783.	MPA-B118	B118	INDIAN POINT 2	M83631	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
784.	MPA-B118	B118	INDIAN POINT 3	M83632	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
785.	MPA-B118	B118	KEWAUNEE	M83633	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
786.	MPA-B118	B118	LASALLE 1	M83634	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
787.	MPA-B118	B118	LASALLE 2	M83635	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
788.	MPA-B118	B118	LIMERICK 1	M83636	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
789.	MPA-B118	B118	LIMERICK 2	M83637	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
790.	MPA-B118	B118	MAINE YANKEE	M83638	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
791.	MPA-B118	B118	MCGUIRE 1	M83639	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
792.	MPA-B118	B118	MCGUIRE 2	M83640	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
793.	MPA-B118	B118	MILLSTONE 1	M83641	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
794.	MPA-B118	B118	MILLSTONE 2	M83642	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
795.	MPA-B118	B118	MILLSTONE 3	M83643	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/93
796.	MPA-B118	B118	MONTICELLO	M83644	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
797.	MPA-B118	B118	NINE MILE POINT 1	M83645	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
798.	MPA-B118	B118	NINE MILE POINT 2	M83646	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
799.	MPA-B118	B118	NORTH ANNA 1	M83647	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
800.	MPA-B118	B118	NORTH ANNA 2	M83648	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
801.	MPA-B118	B118	OCONEE 1	M83649	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
802.	MPA-B118	B118	OCONEE 2	M83650	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
803.	MPA-B118	B118	OCONEE 3	M83651	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
804.	MPA-B118	B118	OYSTER CREEK 1	M83652	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
805.	MPA-B118	B118	PALISADES	M83653	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/

806.	MPA-B118	B118	PALO VERDE 1	M83654	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/94
807.	MPA-B118	B118	PALO VERDE 2	M83655	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/94
808.	MPA-B118	B118	PALO VERDE 3	M83656	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/94
809.	MPA-B118	B118	PEACH BOTTOM 2	M83657	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
810.	MPA-B118	B118	PEACH BOTTOM 3	M83658	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
811.	MPA-B118	B118	PERRY 1	M83659	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
812.	MPA-B118	B118	PILGRIM 1	M83660	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/99
813.	MPA-B118	B118	POINT BEACH 1	M83661	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
814.	MPA-B118	B118	POINT BEACH 2	M83662	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
815.	MPA-B118	B118	PRAIRIE ISLAND 1	M83663	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
816.	MPA-B118	B118	PRAIRIE ISLAND 2	M83664	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
817.	MPA-B118	B118	QUAD CITIES 1	M83665	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
818.	MPA-B118	B118	QUAD CITIES 2	M83666	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
819.	MPA-B118	B118	RIVER BEND 1	M83667	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
820.	MPA-B118	B118	ROBINSON 2	M83668	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
821.	MPA-B118	B118	SALEM 1	M83669	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
822.	MPA-B118	B118	SALEM 2	M83670	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
823.	MPA-B118	B118	SAN ONOFRE 2	M83671	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
824.	MPA-B118	B118	SAN ONOFRE 3	M83672	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
825.	MPA-B118	B118	SEABROOK 1	M83673	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/93
826.	MPA-B118	B118	SEQUOYAH 1	M83674	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/95
827.	MPA-B118	B118	SEQUOYAH 2	M83675	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	06/95
828.	MPA-B118	B118	SOUTH TEXAS 1	M83676	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	01/96
829.	MPA-B118	B118	SOUTH TEXAS 2	M83677	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	01/96
830.	MPA-B118	B118	ST LUCIE 1	M83678	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
831.	MPA-B118	B118	ST LUCIE 2	M83679	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
832.	MPA-B118	B118	SUNNER 1	M83680	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
833.	MPA-B118	B118	SURRY 1	M83681	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
834.	MPA-B118	B118	SURRY 2	M83682	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
835.	MPA-B118	B118	SUSQUEHANNA 1	M83683	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
836.	MPA-B118	B118	SUSQUEHANNA 2	M83684	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
837.	MPA-B118	B118	THREE MILE ISLAND 1	M83685	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
838.	MPA-B118	B118	TURKEY POINT 3	M83687	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
839.	MPA-B118	B118	TURKEY POINT 4	M83688	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	12/95
840.	MPA-B118	B118	VERMONT YANKEE 1	M83689	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/

841.	MPA-B118	B118	VOGTLE 1	M83690	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
842.	MPA-B118	B118	VOGTLE 2	M83691	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
843.	MPA-B118	B118	WASHINGTON NUCLEAR 2	M83695	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
844.	MPA-B118	B118	WATERFORD 3	M83692	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
845.	MPA-B118	B118	WOLF CREEK 1	M83696	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
846.	MPA-B118	B118	ZION 1	M83697	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
847.	MPA-B118	B118	ZION 2	M83698	IPE EXTERNAL EVENTS (GL88-20, SUPP 4)	/
848.	MPA-B122	B122	ARKANSAS 1	M85352	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
849.	MPA-B122	B122	ARKANSAS 2	M85353	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
850.	MPA-B122	B122	BEAVER VALLEY 1	M85354	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
851.	MPA-B122	B122	BEAVER VALLEY 2	M85355	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
852.	MPA-B122	B122	BIG ROCK POINT 1	M85358	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
853.	MPA-B122	B122	BRAIDWOOD 1	M85359	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
854.	MPA-B122	B122	BRAIDWOOD 2	M85360	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
855.	MPA-B122	B122	BROWNS FERRY 1	M85361	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
856.	MPA-B122	B122	BROWNS FERRY 2	M85362	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
857.	MPA-B122	B122	BROWNS FERRY 3	M85363	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
858.	MPA-B122	B122	BYRON 1	M85366	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
859.	MPA-B122	B122	BYRON 2	M85367	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
860.	MPA-B122	B122	CALLAWAY 1	M85368	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
861.	MPA-B122	B122	CATAMBA 1	M85371	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
862.	MPA-B122	B122	CATAMBA 2	M85372	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
863.	MPA-B122	B122	CLINTON 1	M85373	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
864.	MPA-B122	B122	COMANCHE PEAK 1	M85374	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
865.	MPA-B122	B122	COOPER STATION	M85378	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
866.	MPA-B122	B122	CRYSTAL RIVER 3	M85379	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
867.	MPA-B122	B122	DAVIS-BESSE 1	M85380	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
868.	MPA-B122	B122	DIABLO CANYON 1	M85381	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
869.	MPA-B122	B122	DIABLO CANYON 2	M85382	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
870.	MPA-B122	B122	DRESDEN 2	M85383	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
871.	MPA-B122	B122	DRESDEN 3	M85384	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
872.	MPA-B122	B122	FARLEY 1	M85386	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
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877.	MPA-B122	B122	GRAND GULF 1	M85392	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	01/94
878.	MPA-B122	B122	HARRIS 1	M85394	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
879.	MPA-B122	B122	HATCH 1	M85395	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/95
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884.	MPA-B122	B122	LASALLE 1	M85401	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
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890.	MPA-B122	B122	MCGUIRE 2	M85407	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/94
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897.	MPA-B122	B122	NORTH ANNA 2	M85415	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
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900.	MPA-B122	B122	OCONEE 3	M85418	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
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931.	MPA-B122	B122	THREE MILE ISLAND 1	M85453	RESPONSE TO B-90-01, LOSS OF FILL OIL IN ROSEMOUNT TRANS (X001)	12/93
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941.	MPA-C011	C011	BROWNS FERRY 3	M88931	RPS POWER SUPPLY	06/95

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10. SUPPLEMENTARY NOTES

11. ABSTRACT (200 words or less)  
As part of ongoing U.S. Nuclear Regulatory Commission (NRC) efforts to ensure the quality and accountability of safety issue information, a program was established whereby an annual NUREG report would be published on the status of licensee implementation and NRC verification of safety issues in major NRC requirement areas. This information was compiled and reported in three NUREG volumes. Volume 1, published in March 1991, addressed the status of Three Mile Island (TMI) Action Plan Requirements. Volume 2, published in May 1991, addressed the status of unresolved safety issues (USIs). Volume 3, published in June 1991, addressed the implementation and verification status of generic safety issues (GSIs). Supplement 1, published in December 1991 combined these volumes into a single report and provided updated information as of September 30, 1991. Supplement 2, published in December 1992, provided updated information on TMI, USI, and GSI issues and included status of all other Multiplant Actions (MPAs). This annual NUREG report provides updated information on TMI, USI, and GSI and other MPAs as of September 30, 1993. The data contained in these NUREG reports are a product of the NRC's Safety Issues Management System (SIMS) database, which is maintained by the Project Management Staff in the Office of Nuclear Reactor Regulation and by NRC regional personnel. This report is to provide a comprehensive description of the implementation and verification status of TMI Action Plan Requirements, USIs, GSIs, and other MPAs that have been resolved and involve implementation of an action or actions by licensees. This report makes the information available to other interested parties, including the public. An additional purpose of this NUREG report is to serve as a follow-on to NUREG-0933, "A Prioritization of Generic Safety Issues," which tracks safety issues up until requirements are approved for imposition at licensed plants or until the NRC issues a request for action by licensees.

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