

PROJECT
INSTRUCTION

Sargent & Lundy

INSTRUCTION PI-MP3-09
REV. 1

Client: Northeast Utilities

Station: Millstone Unit 3

Title: PREPARATION AND APPROVAL OF CHECKLISTS

☒ Safety-Related

☐ Non-Safety-Related

Reviewed By:

Approved By:


System Lead	Programmatic Lead	O&M Lead	Accident Mitigation Lead	QA Engineer	Internal Review Committee Chairman	Verification Team Manager
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Date: 4-28-97

Description

Rev. 1

- Added requirement to obtain NRC approval of any new or revised checklist

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1.0 PURPOSE

This project instruction (PI) establishes the Sargent & Lundy procedure for preparing checklists to be used in the Independent Corrective Action Verification Program (ICAVP) reviews. These checklists shall be used by the ICAVP reviewers to document and verify key attributes and areas covered in the ICAVP. These checklists will provide the team with the basis for determining if discrepancies exist in the design, configuration, and operation, maintenance and testing of the Millstone Unit 3 plant (MP3).

All areas of the ICAVP shall utilize checklists to control the review activities. These areas include:

- System Reviews
- Operation, Maintenance and Testing Reviews
- Physical Configuration Reviews
- Programmatic Reviews
- Accident Mitigation Systems Review

As many checklists as is required to adequately cover the particular review area shall be utilized.

2.0 REFERENCES

- 2.1 MP3 Final Safety Analysis Report
- 2.2 MP3 Safety Evaluation Report
- 2.3 MP3 Technical Specifications
- 2.4 MP3 Design Criteria
- 2.5 10CFR50 Appendix A General Design Criteria
- 2.6 NRC Inspection Manual, Chapter 2535, Appendix A

3.0 DEFINITIONS

- 3.1 **System Review** - In depth review of the design of the systems in the scope of the ICAVP

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- 3.2 **Operation, Maintenance and Testing Review** - Review of the operating, maintenance and testing procedures, and training manuals for the systems within the scope of the ICAVP
- 3.3 **Physical Configuration Review** - Walkdowns to verify that the current as-built conditions are in conformance with the design and licensing basis for the systems within the scope of the ICAVP
- 3.4 **Programmatic Review** - Review of programs and processes addressing "generic" (non-system specific) issues
- 3.5 **Accident Mitigation System Review** - Review of the critical design characteristics for the accident mitigating systems to ensure that they can perform their required safety functions.

4.0 **RESPONSIBILITIES**

- 4.1 A Verification Team (VT) Member shall be responsible for preparation of a checklist and for performing a review associated with a checklist.
- 4.2 The VT Lead or his designee shall be responsible for approving the checklists in his area and for providing concurrence for the reviews conducted within his area.
- 4.3 The VT Manager shall be responsible for resolving comments which cannot be resolved between a team member (reviewer) and the Team Lead. The Verification Team Manager may also approve checklists.

5.0 **PROCEDURE**

5.1 General

The checklists are intended to assure that key issues associated with a particular area or element are adequately and consistently evaluated during the review process. Some checklists may be system specific, but many of the checklists will apply to elements that are common to many or all systems.

5.2 Checklist Preparation

- 5.2.1 Checklists shall be prepared prior to performing the affected review activities.

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- 5.2.2 The checklist shall be prepared by an individual knowledgeable in the area or element under review. The preparer may be the individual who will perform the review.
- 5.2.3 The first page of the checklist shall use a form similar to that shown in Attachment 7.2. The checklist shall contain questions related to key issues applicable to the area or element under review. Applicable checklists developed for previous project reviews may be utilized as a source for checklist preparation. Input for checklist preparation may be obtained from the following:

MP3 Final Safety Analysis Report
MP3 Safety Evaluation Report
MP3 Technical Specifications
MP3 Design Criteria
10CFR50 Appendix A General Design Criteria
USNRC Regulatory Guides applicable to MP3
Industry Codes and Standards applicable to MP3

In addition to the above MP3 source documents, S&L design experience and practices, as well as industry experience, shall provide a basis for checklist preparation. Chapter 2535, "Design Verification Programs", Appendix A, of the NRC Inspection Manual also provides guidance for checklist preparation, (Ref. 2.6).

Checklists shall address system design adequacy, component design adequacy, design process adequacy, and plant procedure adequacy. Specific accept/reject criteria shall be provided for configuration reviews.

- 5.2.4 Checklists shall be numbered by each ICAVP group according to the following scheme:

CK-MP3-XX-XX

Project Instruction
Applicable to the
Checklist

Sequential Number

- 5.2.5 The Team Member designated as preparer of the checklist shall sign and date the checklist. The checklist shall be approved by the respective VT Lead or by the VT Manager.
- 5.2.6 The VT Lead shall file checklists in the project file in accordance with PI-MP3-12.

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5.3 Checklist Completion

The ICAVP Verifier assigned to perform the evaluation of a particular area/element shall complete the appropriate checklist according to the requirements of the applicable project instruction and sign and date the checklist. It is recommended that the checklist be used to document the basis for accepting questionable items which might otherwise be considered discrepant by another reviewer. As a minimum, the appropriate VT Lead or his designee will indicate his concurrence with the review work performed by the ICAVP Verifier by also signing and dating the checklist. This concurrence will confirm that the checklist is complete and that there is adequate explanation describing the results. Concurrence shall not be given unless there is documentation of those records and/or documents used in filling out the checklist.

Any unresolved comments between the ICAVP reviewer and the VT Lead will be resolved by the VT Manager. Any differing professional opinions shall be handled in accordance with PI-MP3-10.

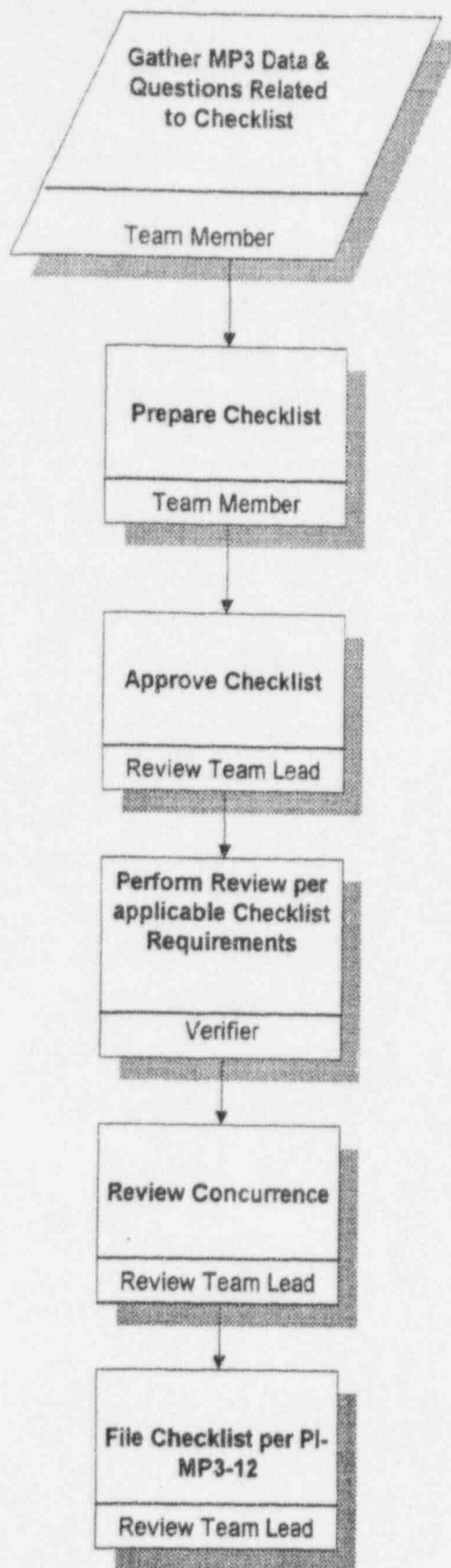
Discrepancies identified as a result of the checklist review shall be processed in accordance with PI-MP3-11.

6.0 REVISIONS

Any revisions to a checklist shall be prepared and approved in the same manner as the original issue. The revision level of the checklist shall be indicated on the checklist. Any new or revised checklist shall be approved by the NRC prior to use. If a checklist revision is made subsequent to the completion of any reviews, the affected review shall also be updated, as applicable, to account for the revisions to the checklist.

7.0 ATTACHMENTS

- 7.1 ICAVP Process Flowchart, "Checklist Preparation, Approval and Use"
(1 page)
- 7.2 Sample Checklist Form (1 page)



ICAVP PROCESS FLOWCHART
Checklist Preparation, Approval and Use

Sample Checklist Cover Page

Northeast Utilities
Millstone - Unit 3

Independent Corrective Action Verification Program
(ICAVP)

System Review Checklist

CK-MP3-02 -4.3, Rev. 0

Electrical Schematic Review Checklist

Prepared by: _____
Name Signature Date

Approved by: _____
Name Signature Date

IMPLEMENTATION

System		
Document No./Rev.		
Verified by:		Date:
Concurrence by:		Date: