NEI 03-08 [Rev 3]

GUIDELINE FOR THE MANAGEMENT OF MATERIALS ISSUES

February 2017

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NOTICE

TABLE OF CONTENTS

GUIDELINE FOR THE MANAGEMENT OF MATERIALS ISSUES

1 INTRODUCTION AND BACKGROUND

The Industry Guideline for the Management of Materials Issues outlines the policy and practices that the industry commits to follow in managing materials aging issues. The guideline:

- Documents the formal Industry Initiative on Management of Industry Materials Issues (the "Initiative").
- States the policy upon which the Initiative is based.
- Defines the roles and responsibilities established to oversee industry performance on the Initiative.
- Outlines the responsibilities of the utilities, the industry materials Issue Programs and INPO in supporting the Initiative and this guideline.
- Identifies responsibilities for ownership of implementation of the Materials Initiative.

More specifically, the industry's policy for managing materials issues (the "Policy") provides the framework within which all materials degradation and aging management work will be performed. The guidelines define the scope to which they apply and provide guidance on how the utilities and the Issue Programs they fund operate to ensure that the Policy is effectively implemented. Historically two groups, one executive and one technical, were established under the NEI Nuclear Strategic Issues Advisory Committee (NSIAC) structure to assist the utilities and Issue Programs in Policy implementation. These two groups (MEOG, Materials Executive Oversight Group, and MTAG, Materials Technical Advisory Group) were not directly involved in technical work, which continued to reside in the relevant Issue Programs; rather they provided a focal point that maintained an overall coordination and integration of the ongoing industry activities to meet the strategic goals and effectively monitor Policy implementation. These groups also developed the foundation documents that defined the expectations for implementation of the Initiative.

The assessment of industry performance under the Materials Initiative that was completed in 2008 and 2009 concluded that the MTAG and MEOG were no longer necessary to oversee industry performance. The overall structure and membership of the materials Issue Programs was modified and their responsibilities changed as described in this document so that the oversight goals of the Initiative will continue to be met.

2 POLICY

2.1 INDUSTRY INITIATIVE ON THE MANAGEMENT OF MATERIALS ISSUES

Chapter 1 The Industry Initiative on Management of Materials Issues commits each nuclear utility to adopt the responsibilities and processes described in this document. The following commitment was adopted by the NSIAC as a formal Industry Initiative in May 2003:

The objective of this Initiative is to assure safe, reliable and efficient operation of the U.S. nuclear power plants in the management of materials issues.

Each licensee will endorse, support and meet the intent of NEI 03-08, Guideline for the Management of Materials Issues. This initiative is effective January 2, 2004.

The purpose of this Initiative is to:

Provide a consistent management process
Provide for prioritization of materials issues
Provide for proactive approaches
Provide for integrated and coordinated approaches to materials issues

Actions required by this Initiative include:

Commitment of executive leadership and technical personnel
Commitment of funds for materials issues within the scope of this Initiative
Commitment to implement applicable guidance documents
Provision for oversight of implementation

2.2 MANAGEMENT POLICY COMMITMENT

Through the activities described in the following sections, the industry will ensure that its management of materials degradation and aging is forward-looking and coordinated to the maximum extent practical. Additionally, the industry will continue to rapidly identify, react and effectively respond to emerging issues. The associated work will be managed to emphasize safety and operational risk significance as the first priority, appropriately balancing long-term aging management and cost as additional considerations. To that end, as issues are identified and as work is planned, the groups involved in funding, managing and providing program oversight will ensure that the safety and operational risk significance of each issue is fully established prior to final disposition.

2.3 SCOPE

The Industry Initiative applies to all NEI U.S. member utilities and the materials management programs that they fund and support. This specifically includes programs conducting work related to:

- PWR and BWR reactor pressure vessel, reactor internals and primary pressure boundary components.
- PWR steam generators.

- Non Destructive Examination (NDE) and chemistry/corrosion control programs that provide support to the focused programs above.
- Other materials related items as may be directed by the NSIAC.

The industry programs and areas (referred to herein as "Issue Programs") governed by this guideline are listed in Appendix A. The applicability of the Initiative to new and revised programs will be assessed as necessary by NSIAC. Appendix A will be updated as needed.

2.4 EXPECTATIONS

The approach to addressing materials issues embodied in the Policy is a substantial change from the approach applied prior to the approval of the Materials Initiative. This approach requires a high level of understanding, commitment and alignment in support of the Policy among industry executives.

The overall goal of this Policy and the associated guidelines is to ensure that the industry's management of materials degradation and aging is forward-looking, focused on issues commensurate with their safety significance, and coordinated to the maximum extent practical. Additionally, the industry will continue to rapidly identify, react and effectively respond to emerging issues. When properly implemented, this should result in fewer unanticipated issues that consume an inordinate level of industry resources, and divert the focus from an orderly approach to managing materials performance.

It is expected that every utility will fully participate in the implementation of the materials management activities applicable to its plants.

The details for the identification and management of industry materials issues are contained in this guideline.

2.5 IMPLEMENTATION

These guidelines were implemented as an Industry Initiative adopted by the NEI Nuclear Strategic Issues Advisory Committee in May of 2003. Its requirements were in place before January 2, 2004. Utility implementation of these guidelines will be verified as directed by the NSIAC.

3 INDUSTRY MATERIALS ISSUES OVERSIGHT AND COORDINATION

3.1 GENERAL EXPECTATIONS

An industry materials oversight group shall be established with the following responsibilities:

- Developing and maintaining a high-level strategic approach to managing materials issues.
- Ensuring appropriate priorities for materials management.
- Ensuring effective coordination and interface among the various industry Issue Programs.

The oversight group will provide the following updates to NSIAC:

- As appropriate:
  - Status of materials management issues including the identification of any issues that may not be receiving a level of attention commensurate with their potential impact.
- Annually:
  - Emerging issues
  - Key performance indicators
  - Regulatory interface activities/issues
  - Newly promulgated guideline requirements
  - Need for coordinated industry responses
  - Funding trends
  - Personnel and succession planning
  - Strategic direction/issues

In addition, the oversight group will be responsible for:

- Reviewing INPO's integration into the operation of the Issue Programs, both in supporting issue identification and in monitoring guidelines implementation and follow-up.
- Managing the following aspects of the major materials issue process:
  - Identifying when additional funding may be necessary and communicating these needs to the EPRI Nuclear Power Council (NPC), NSSS Owners Groups and NSIAC as appropriate.
  - Reviewing the regulatory strategy for major industry issues.
  - Ensuring that the implementation verification requirements of industry materials management guidelines are being followed.
- Monitoring the IP self-assessment process and communicating relevant observations among the IPs.

- Coordinating annual meeting(s) among the EPRI materials-related programs, EPRI NDE, the NSSS OGs, and other related groups to review and assess the status of materials work, including how the items identified in Section 5 are being addressed. Part of this annual review will address current and projected funding needs required to meet the intent of the Materials Initiative.
- Reviewing operating experience on relevant materials issues.
- Providing support for the emergent major materials issue process discussed in Section 8.0 by:
  - Evaluating and describing the effectiveness of the regulatory interface strategy.
  - Evaluating and providing recommendations on implementation verification requirements.
  - Tacking resolution.
- Identifying the need for periodic training on the Materials Initiative and supporting the training when conducted.
- Holding oversight group meetings and phone calls as necessary to carry out the responsibilities listed above.

A major role of this oversight group shall be the ongoing review of the work plans from all the Issue Programs to maintain a complete understanding of the current body of work. This activity should result in an overall view that identifies, at a high level, the major materials challenges, IP interfaces, and the work needed to address/resolve the challenges. This high-level view should identify specific items that need to be addressed, the schedule associated with addressing the items/challenges, and the Issue Program responsible for the actions (including, in some cases, identification of the fact that the issue is not being addressed based on resource constraints, lack of technology etc.).

3.2 IMPLEMENTATION

Effective January 1, 2010 the EPRI Materials Degradation and Aging APC (MAPC) has accepted the functions outlined above. The specific roles and membership of the MAPC are further described in the EPRI "Nuclear Sector Operations Protocol."

4 ORGANIZATION

As noted in Section 3 above, beginning January 1, 2010, the EPRI Materials Degradation and Aging Action Plan Committee (MAPC) has the principal role for overseeing industry activities related to primary system materials and the continuing commitment to the Materials Initiative. It will accomplish this through a combination of direct governance over those Issue Programs (IPs) for which it is directly responsible and coordination with those IPs working subject to the initiative, but not under the MAPC. The IPs under the MAPC are:

- EPRI BWR Vessel and Internals Project (BWRVIP)
- EPRI PWR Materials Reliability Program (MRP)
- EPRI Steam Generator Management Program (SGMP)
- EPRI Primary Systems Corrosion Research (PSCR)

The IPs not under the MAPC, but subject to the initiative and part of the coordinated effort are:

- EPRI NDE Action Plan Committee
- EPRI Water Chemistry Control
- PWROG Materials Committee

Coordination will take place through a combination of cross memberships and regular meetings between the IPs.

The MAPC roles and responsibilities are described in the EPRI Nuclear Sector Operations Protocol. Membership on the MAPC will be chosen to ensure adequate coordination between the materials Issue Programs under the Materials Initiative and broad representation by nuclear utilities. Specifically, membership will include the following:

- An Executive Chairman who will be a CNO to ensure the effective interface between the materials programs and the NSIAC
- A Chairman who will manage all of the day-to-day business of the APC
- The Executive Sponsor of the PWROG Materials Committee
- The Chairman of the BWRVIP Executive Committee
- The Chairman of the PMMP Executive Committee
- The Technical Chairmen of each of the Issue Programs to which the Materials Initiative is applicable
- At-large members to include several EPRI NPC members and, to the extent practical, a representative of each of the major US nuclear fleets unless already included in the members listed above
- INPO
- NEI

5 ROLES AND RESPONSIBILITIES OF ISSUE PROGRAMS

In the context of this Initiative, the term "Issue Program" refers to industry groups that address materials issues, which includes the EPRI Materials Issue Programs as well as related EPRI Programs and NSSS Owners Group Programs. The specific groups/programs are listed in Appendix A. Each Issue Program retains the primary responsibility for managing issues within its scope. In this respect, each program is responsible for identifying and appropriately prioritizing work, completing projects with the highest level of quality and focus on safety, and obtaining the necessary funding and resources needed to address the issues. The Issue Programs shall keep the MAPC informed of completed, ongoing, and planned activities and of any other situations where MAPC involvement is necessary. At least annually, each Issue Program will provide input to support the annual MAPC update to the NSIAC.

This Guideline will be implemented across the Issue Programs within the scope of the Industry Initiative through the activities outlined below.

5.1 GENERAL

All industry Issue Programs are responsible for:

- Meeting the intent of the industry Initiative on the Management of Materials Issues.
- Establishing and maintaining a nuclear safety focused culture.
- Resolving materials issues that fall within the scope of their programs.
- Following accepted industry practices for the management of materials issues.
- Informing the MAPC of situations that affect the disposition of materials issues.
- Providing high quality deliverables that meet the intent of this guideline for all issues addressed.
- Performing periodic self-assessments and gap analyses.
- Defining the regulatory interface responsibilities at the outset of addressing any major issue.
- Communicating laterally among groups to effectively coordinate materials issues.
- Developing and maintaining a work plan that evaluates strategic issues through the use of such tools as the Materials Degradation Matrix (MDM) and associated Issue Management Tables (IMTs).
- Providing input to support the annual MAPC update to the NSIAC.

All industry Issue Programs that issue guidance with Mandatory or Needed elements are responsible for:

- Developing a process to determine which deliverables require industry enforcement and implementation follow-up.
- Identifying implementation requirements for deliverables and guidelines.
- Utilizing the screening tool in Appendix C to determine when documents warrant NRC review and approval

- Establishing and following a protocol for managing emerging materials issues to ensure that the affected utility receives prompt and sufficient support and that communications with other IPs adequately coordinate related activities.
- Maintaining a set of performance metrics to monitor IP operation, as directed by MAPC. A subset of the metrics shall be common to all IPs under the Materials Initiative to ensure clear understanding of overall industry performance.

5.2 CHARTER AND ADMINISTRATIVE PROCEDURES

Each Issue Program will have the necessary administrative procedures or structure to implement the items outlined herein.

5.3 UTILITY OVERSIGHT AND PARTICIPATION

The following apply to utility oversight and participation:

- Utility oversight shall be provided by both technical and executive level group(s) within each program or industry structure, irrespective of the program management organization (e.g., EPRI, OG, etc.).
- The executive level group shall determine the strategy for the regulatory interface at the beginning of every issue to ensure the interface is managed with the long-term goals of the associated projects in mind. This includes consideration of the impact on existing activities and the need to make changes in approaches and priorities.
- Membership policies of the industry groups shall address specific responsibilities, tenure and rotation (leadership succession planning), including methods to ensure that the appropriate level of participation, oversight and guidance is provided.
- Each Issue Program shall define its liaison with NEI, EPRI, INPO, OGs and OEMs.

5.4 SCOPE

The technical scope and physical boundaries within which work and issue management will take place shall be clearly defined. When appropriate, this should include an assessment and ranking of all systems and components that fall within the scope using safety and operational risk assessment approaches to prioritize and plan work.

5.5 FUNDING

As funding needs are determined, the following will be addressed:

- The overall need for a more forward-looking approach to the body of work. This activity, along with the next two items below, should include defining a process for identifying to the MAPC any funding shortfalls that would limit the group's ability to manage its program to meet the intent of the Guideline for the Management of Materials Issues.
- The need to develop and fund long-term research needs and mitigation measures
- The need to budget for emerging issues so that ongoing activities and long-term research are not hindered.
- The need for equity among those who fund and those who benefit from the work

- The appropriate funding method including the benefits and limitations of "cafeteria-style" funding, when used.

5.6 ISSUE IDENTIFICATION

A formal process for materials issue identification and prioritization shall be defined. The process shall consider relevant international and domestic operating experience. The process shall also include a protocol for contacting the MAPC if important issues are identified that cannot be addressed in a timely manner or that require coordination between several IPs.

5.7 CONDUCT OF WORK

The process for planning and conducting the work shall clearly address the intent of this guideline and the underlying culture required, both by the Issue Program and within the individual utilities supporting the program. The work shall be managed to emphasize safety and operational risk significance as the first priority, appropriately balancing long-term aging management and cost as additional considerations. For example, this may be accomplished using tools such as the MDM and IMTs. Additionally, the IP must continue to have the ability to identify, react and effectively respond to emerging issues. As issues are identified and work is planned, the entities involved in funding, managing and providing direct program oversight shall ensure that the safety and operational risk significance of each issue is fully understood prior to final disposition.

5.8 ISSUE RESOLUTION AND IMPLEMENTATION FOLLOW-UP

IPs shall determine the best approach to ensuring that recommendations and resolutions to important materials issues are appropriately implemented. As deliverables or guidelines are developed, expected actions should be classified as to relative level of importance:

- Mandatory – to be implemented at all plants where applicable
- Needed – to be implemented whenever possible but alternative approaches are acceptable
- Good Practice – implementation is expected to provide significant operational and reliability benefits, but the extent of use is at the discretion of the individual plant/utility.

Guidance for defining classifications, approving associated documents, verifying implementation, and justifying situations where guidance cannot be met is provided in Appendix B (*Implementation Protocol*).

INPO's role in assisting the Issue Program in implementation and follow-up should be defined by INPO and the Executive Committee of the responsible Issue Program.

5.9 REGULATORY INTERFACE

The approach to be used in interfacing with the NRC shall be determined at the beginning of any project where such interface is required, and managed by the designated IP leadership in partnership with NEI. This approach should be closely monitored by the executive-level body of the Issue Program.

5.10 COMMUNICATIONS

The following elements related to communications should be established:

- A protocol/process for communicating with other materials groups and with the MAPC shall be defined.
- MAPC shall be informed when documents with 'Mandatory' and/or 'Needed' elements (per the Implementation Protocol) are published or revised to facilitate maintaining a list of these documents and making the list available to all stakeholders.
- Effective communication between the technical and executive levels within each Issue Program and to the same levels within the utilities participating in each program shall be ensured.
- An annual report to NSIAC from the MAPC, explaining the progress on the materials issues it is managing, shall be provided. The report should address the following areas:
  - Major near-term deliverables.
  - Program funding, both for the current year as well as expected needs for the following two to three years.
  - Any projected funding shortfalls
  - Ongoing and new 'cross-cutting' issues
  - Status of work to address prioritized issues and gaps
  - Results of self-assessments and key performance indicators
  - Problems and issues that need to be brought to the attention of the NSIAC including important materials issues that are not being addressed.

5.11 SELF-ASSESSMENTS

Each IP shall formally support a periodic self-assessment process:

- Periodic focused self-assessments shall be performed at least every 3 years.
- Additional self-assessments may be initiated in response to situations that warrant closer review of performance.
- Outside organizations may request that specific topics be addressed during a scheduled IP self-assessment evolution. An example of this type of request might include the MAPC asking IPs to evaluate trends in working group attendance and participation.
- The program shall ensure self-assessment results are evaluated and acted upon. Findings shall be evaluated during subsequent review periods to assess the effectiveness of any corrective actions.
- The program shall ensure self-assessment results are shared with stakeholders, including IP participants, IP management or executive committees, and with the MAPC.
- The program may provide for periodic assessment by outside organizations.

5.12 WORK PLAN

A multi-year work plan that includes project budgeting and issues prioritization shall be developed and maintained.

6 ROLES AND RESPONSIBILITIES OF INDIVIDUAL UTILITIES

Each utility shall establish and maintain a Reactor Coolant System (RCS) Materials Degradation Management Program (RCS MDMP) that incorporates the following key elements:

- A high level program that ensures utility implementation of the requirements of NEI 03-08.
- Implementation of the "Mandatory" and "Needed" elements of the documents published by the materials Issue Programs listed in Appendix A.

An effective RCS MDMP has technical, cultural and programmatic attributes.

- Technical: RCS materials should be managed to meet structural, leakage, and functional performance objectives.
- Cultural: A corporate philosophy for managing materials degradation should be adopted that incorporates the principles below. Management ownership is the key to this attribute.
  - Proactive
  - Long term
  - Personnel development
  - Industry participation
- Programmatic: The RCS MDMP should be defined by written programs or procedures that define scope, objectives, process, organizational structure and performance metrics.

In addition to the RCS MDMP, each utility shall:

- Participate in the materials management groups, including:
  - Funding the programs.
  - Contributing technical resources and executive leadership to industry materials efforts.
  - Sharing all materials operational experience.
  - Implementing appropriate guidelines and recommendations.
- Evaluate current business and strategic plans for appropriate focus on materials issues.
- Promptly communicate significant new materials experience to the applicable IP.

7 ROLES AND RESPONSIBILITIES OF INPO

INPO will take an active role in promoting a forward-looking, proactive and sustainable approach to industry materials issues that impact safety and reliability. In this role, INPO will continue to promote a standard of excellence in its interactions with the industry. Specific roles and responsibilities include:

- Participating at all levels of the industry materials management initiative, from Issue Programs to the MAPC.

- On-site reviewing and evaluating plant activities against industry-developed guidelines and standards of excellence.
- Providing periodic updates to the industry, as appropriate, on observed trends of performance that need additional attention.
- Monitoring, reviewing and analyzing domestic and international operating experience and communicating important data or trends to the industry.
- Obtaining technical advice from appropriate industry groups to resolve controversial materials issues identified at a specific plant or utility.

The quality and depth of INPO's review programs depend heavily on the availability of qualified INPO staff and the participation of experienced industry peers. In each case, the level of resources required will be determined as the specific program guidelines and standards are developed.

8 ROLES AND RESPONSIBILITIES OF NEI

The Nuclear Energy Institute (NEI) is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations and entities involved in the nuclear energy industry. The scope of this responsibility includes NEI-controlled documents such as NEI 03-08. Although other entities such as EPRI or PWROG for example, may be responsible for the technical content for portions or sections of the document, NEI is accountable to the NSIAC and its membership for the content. Any changes, additions or revisions to NEI 03-08 shall take place in coordination with and under the project management control of the designated NEI Project Manager.

9 MAJOR INDUSTRY EMERGENT MATERIALS ISSUE PROCESS

Utilities shall promptly communicate new materials issues with generic significance to the industry in order to allow an evaluation of the generic aspects of the information in a timely manner.

Each Issue Program shall develop a protocol (or follow an accepted protocol) for rapidly identifying, assessing, and addressing these extraordinary issues that have the potential for a major operational, regulatory or financial impact on the industry. The responsible IP(s) shall evaluate the significance (technical and regulatory) of the information and its potential effect on the fleet. The IP(s) shall work with the affected utility to identify appropriate actions that may be necessary to obtain additional data to fully understand the effect of the finding. The objective is to evaluate the information and support the affected utility with decisions and/or actions as appropriate.

Major emergent issues will be monitored by the MAPC. Emerging issues that can be dealt with effectively by the responsible Issue Program need not rise to this level. Such issues should be reported to the MAPC through the normal communication and reporting process.

APPENDIX A

APPLICABLE INDUSTRY MATERIALS ISSUE PROGRAMS

The following Issue Programs' activities in the area of materials management are governed by the intent of this guideline.

- EPRI BWR Vessel and Internals Project (BWRVIP)
- EPRI Materials Reliability Program (MRP)
- EPRI Steam Generator Management Program (SGMP)
- The EPRI Non-Destructive Examination Program (NDE)
- The EPRI Water Chemistry Control Program
- EPRI Primary Systems Corrosion Research Program (PSCR)
- The materials management activities in the Pressurizer Water Reactor Owners Group Program (PWROG Materials Committee).

APPENDIX B

IMPLEMENTATION PROTOCOL

This document provides guidance for the identification, approval, and treatment of the implementation aspects of materials-related work products, or elements of work products. This appendix (the Implementation Protocol) is a categorized as a "Needed" document under the Materials Initiative. Guidance in this document associated with the word "shall**" identifies a "Needed" element.**

1 INTRODUCTION

Industry materials Issue Programs (IP) frequently issue recommendations and produce documents that may need to be implemented to effectively manage materials issues. It is critical that the importance of the information within these documents be clearly communicated to the utility end-users and that the industry assures effective implementation of specific recommendations and associated guidelines. The following sections of NEI 03-08, *Guideline for the Management of Materials Issues*, identify specific IP, utility, and INPO actions associated with the implementation of published work products:

- *Section 5, Roles and Responsibilities of Issue Programs:*
  - *5.1, General*
    - *Identify implementation requirements for deliverables and guidelines, and*
    - *Develop a process to determine which deliverables require industry enforcement and implementation follow-up.*
  - *Section 5.8, Issue Resolution and Implementation Follow-Up, calls for IPs to classify actions associated with guideline implementation in accordance with their relative level of importance (specifying "Mandatory", "Needed," and "Good Practice" categories) and to determine the best approach to ensure recommendations and actions are implemented.*
  - *Section 6, Roles and Responsibilities of Individual Utilities, calls for each utility to implement appropriate guidelines and recommendations.*
  - *Section 7, Roles and Responsibilities of INPO, calls for INPO to perform on-site reviews and evaluations of plant activities against industry-developed guidelines and standards of excellence.*

The term "work product(s)" or "product(s)" is used herein to mean those documents issued by the IPs to their members prescribing requirements, recommendations, or guidelines (interim and final).

2 RESPONSIBILITIES

Each materials IP shall either use this protocol explicitly or develop its own procedure consistent with this protocol. The resulting procedure shall be applied to every work product prepared by

the IP. Where an IP implementation protocol and this protocol address the same topic, this protocol takes precedence except where the IP protocol is more restrictive.

All utilities shall adopt applicable IP work products in accordance with the expected level of implementation, or provide an appropriate justification for any deviations.

Each IP shall monitor implementation of its guidance and report implementation effectiveness to the Materials Action Plan Committee (MAPC). The MAPC shall monitor overall implementation of IP guidance and of this protocol and evaluate its effectiveness.

INPO is performing periodic reviews of plant implementation of IP work products, as specified in NEI-03-08.

3 DEFINITIONS

Three implementation categories are described in section 5.8 of this document and are defined in greater detail below.

- Mandatory – to be implemented at all plants where applicable. Criteria that qualify an element of a work product as "Mandatory" include:
  - Element substantively affects the ability of structures, systems and components to perform their intended safety function.
  - Element would be highly risk significant as determined by the responsible IP if not implemented.
  - Element poses a significant threat to continued operation of the affected plants, including economic threats that could reasonably lead to protracted plant shutdown or retirement.
  - A consensus of the responsible materials IP believes the element should be designated as "Mandatory".
- Needed – to be implemented wherever possible, but alternative approaches are acceptable. Criteria that qualify an element of a work product as "Needed" include:
  - Element substantively affects the ability of structures, systems or components to reliably perform their economic function.
  - Element would be moderately risk significant as determined by the responsible IP if not implemented.
  - Element addresses a material degradation mechanism that has significant financial impact on the entire industry, especially where failure at one plant could affect many other plants.
  - A consensus of the responsible materials IP believes the element should be designated as "Needed".

- Good Practice – implementation is expected to provide significant operational and reliability benefits, but the extent of use is at the discretion of the individual utility. Specific elements of a work product that may be assigned this criterion include:
  - Element reflects an industry standard of performance or represents a consensus opinion of the responsible materials IP.
  - A consensus of the responsible materials IP believes the element should be designated as "Good Practice".

It is recognized that there may be products for which none of the three implementation categories are applicable. Many IP work products may contain information such as administrative guidance, data, or literature summaries that have no specific expectation for implementation. Additionally, a good deal of the content of any work product may consist of background material and general information that is important to understand, but that does not need to be implemented.

The categories defined above should be applied carefully to avoid any dilution of the importance of elements assigned an elevated implementation priority.

4 EMERGENT ISSUES

Utilities shall inform the applicable IP of significant emergent materials-related issues occurring at their plants when they have potential generic implications. In order to support this communication, each IP shall be prepared to perform a timely evaluation of the significance of emergent materials issues that fall within the scope of its program. The IP evaluation should be performed within a timeframe that supports the utility's needs where possible. Items that should be considered in the IP's evaluation include:

- Safety significance
- Demonstration of a new degradation type
- Effect on the basis of industry guidance
- Effect on the existing knowledge base
- Expected regulatory significance

Emergent issues shall be processed in accordance with section 8 of this document and IP administrative procedures.

IPs shall establish a process for obtaining or budgeting for the contingency funds necessary to initiate the evaluation of new generically significant materials findings. The funds should be obtainable within the timeframe necessary to support industry response to an emergent issue.

5 IMPLEMENTATION CATEGORY ASSIGNMENT

It is essential that each materials IP screen the elements in its work products to assign the appropriate implementation category. The responsible IP shall perform the screening as part of the document preparation process.

The IP work products should be written in a manner to clearly communicate the category of any element that is "Needed" or "Mandatory" and to assure clear differentiation exists between general information and guidance that requires implementation. For example, work products should include a summary table that lists each "Mandatory", "Needed", and "Good Practice" element contained therein.

6 IMPLEMENTATION LEVEL APPROVALS

Implementation categories for elements within any work product may vary. The approvals outlined in this section shall apply as a function of the highest implementation level identified within a work product. In all cases, the responsible IP establishes the implementation level, the target set of utilities/plants, and the time within which implementation is required.

- Mandatory: The applicable IP executive committee(s) shall approve "Mandatory" elements of work products as follows.
  - In cases where an issue affects a single IP, the applicable IP executive committee approves the implementation level for the associated work product elements.
  - In cases where an issue affects multiple IPs, each cognizant IP approves the associated work product elements or applicable portions thereof.
  - In cases where the IP does not have an executive committee (e.g. NDE), the BWRVIP and PMMP executive committees shall approve the associated work product elements or applicable portions thereof
- Needed: The applicable IP executive committee(s) shall approve "Needed" work product elements in accordance with the same process as outlined above.
- Good Practice: IP approves implementation according to its internal processes.

If difficulties are encountered in establishing a consensus on implementation, the MAPC should be contacted to provide assistance.

MAPC periodically reviews "Mandatory" or "Needed" elements in work products for appropriate scope, applicability, and consistency as part of its oversight and coordination function.

7 WORK PRODUCT NOTIFICATION

The implementation level determined by the IP for the work product should dictate the management level which is notified of new or revised work products. Direct formal notification to executives at the respective utilities is intended to ensure issue awareness and to trigger

appropriate site tracking programs. If deemed appropriate by the responsible IP, NEI may notify NSIAC directly.

The IP responsible for the work product shall ensure that its members are notified when new or revised work products are published and shall ensure that copies of these products are available to its membership. In addition, the following additional notifications shall be made.

Mandatory: The approving IP shall send written notification of new or revised Mandatory products directly to the appropriate utility executives and IP utility representatives with copies of the notification sent to NEI and INPO.

- Needed: The approving IP shall send written notification of new or revised Needed products directly to the appropriate utility executives and IP utility representatives with copies of the notification sent to NEI and INPO.
- Good Practice: The approving IP shall send written notification of new or revised Good Practice products directly to the appropriate utility representatives with copies of the notification sent to NEI and INPO.

The responsible IP may request MAPC or NEI to provide a broader notification of the work product. Depending on the nature of the work product, the document may be distributed to other IPs for information. MAPC shall maintain a list of all active documents that are categorized as Mandatory or Needed.

8 DEVIATIONS

8.1 Utility Internal Processing of Deviations

8.1.a Specific Expectations

When a utility determines that:

- "Mandatory" or "Needed" work product elements will not be fully implemented or will not be implemented in a manner consistent with their intent, or when a work product will not be implemented within the timeframe specified by the responsible IP.

A technical justification for deviation shall be developed and retained with the utility's program documentation or owner-controlled tracking systems. In addition, deviations from "Mandatory" and "Needed" work product elements shall be entered into corrective action programs (CAP). The technical justification shall provide the basis for determining that the proposed deviation meets the same objective, or level of conservatism exhibited by the original work product, and shall clearly state how long the deviation will be in effect.

Justification for deviations from work products or elements shall be reviewed and approved in accordance with the applicable plant procedures and the additional requirements outlined below.

- Good Practice
  - No written justification for deviation is necessary
- Needed
  - Documented in accordance with the plant's corrective action program

- Independent review performed (may be internal or external to the utility)
- Concurrence from the responsible utility executive

- Mandatory
  - Documented in accordance with the plant's corrective action program
  - Independent review performed (may be internal or external to the utility)
  - Concurrence from the responsible utility executive
  - Concurrence by a knowledgeable materials expert independent of the utility justifying the deviation.

8.1.b Utility Reporting of Deviations to the Applicable IP

To maintain the integrity of the deviation process and ensure a consistent approach to guideline implementation (or inability to implement), it is important for utilities to share deviations and the potential for deviations with the IPs and other utilities in an open and timely manner. Timely notification of intended or potential deviations allows the IP to systematically review the issue for potential generic implications and take appropriate actions to facilitate consistent and appropriate implementation of guidance. It is expected that utilities meet the intent of open and timely communication. The following steps are to be followed:

- The utility shall notify the responsible IP of any obstacles or questions associated with conformance to Mandatory or Needed guideline elements as soon as practical after these concerns are identified.
- If a deviation justification is prepared, the approved deviation shall be sent to the responsible IP as soon as possible but no later than 45 days after approval by the utility executive.

8.1.c Utility Notification of Deviations to the NRC

If at any time a utility does not implement any "Mandatory" or "Needed" elements of an approved guideline, the utility shall notify the NRC. The notification should occur at about the same time as the justification for deviation is sent to the IP. The NRC notification shall consist of the licensee transmitting a letter to the NRC Document Control Desk with copies to the NRC Plant Project Manager, the NRC Project Manager responsible for the IP that issued the guidance (or NRR's Division of Component Integrity if no IP PM has been identified), the NRC Site Resident Office and the NRC Regional Office. The licensee shall clearly state what they are deviating from, i.e., inspection requirements, inspection schedule, etc. of the applicable guidelines and summarize what is being done in lieu of the requirements, as necessary. In addition, the letter should be very clear to indicate that the letter is being transmitted for information only and that the licensee is not requesting any action from the NRC staff. A copy of the actual deviation and full technical evaluation is not required to be submitted with the notification

8.2 IP Processing of Deviations

Approved deviations to “Needed” and “Mandatory” work products shall be sent to the applicable IP for review, documentation and distribution to other IP members.

IPs shall review all justifications for deviation to their “Mandatory” and “Needed” guidance documents. The following applies.

- IP review shall be timely, typically at the time of the next meeting of the responsible IP.
- IPs shall review the justifications for deviation for the following considerations
  - Effect on IP guidance.
  - Technical sufficiency (assumptions, breadth of review, consistency of intent with respect to guidance, etc) – this is not an independent review or an approval. The IP assessment is based on its engineering judgment and experience.
  - Generic applicability.
- Generically applicable information relative to the justifications processed shall be communicated to the IP members.
- IPs shall follow up on all justifications for deviation found to be technically insufficient by informing the following organizations of the existence of the deviation and the reasons for the IP concern.
  - The utility that wrote the deviation
  - The executive oversight group for the IP
  - MAPC
- IP executive oversight groups are responsible for additional actions appropriate to address insufficiently justified deviations with the responsible utility.

IPs shall report summaries of deviations to the MAPC annually. This summary shall include:

- The number of deviations taken, broken down by the associated guidance document
- A summary of the general content of the deviations and their implications on IP guidance
- A summary of insufficiently justified deviations and the follow-up actions taken

9 IMPLEMENTATION VERIFICATION AND ISSUE FEEDBACK

The cognizant IP is responsible for developing unambiguous guidance that facilitates implementation and enables monitoring of implementation performance. Work products or elements designated “Mandatory” or “Needed” shall be provided to INPO, who may include these elements in their review visit guidance and verify implementation during periodic review visits.

Utilities are individually responsible for capturing “Mandatory” and “Needed” elements from IPs in their procedures, owner-controlled tracking systems, or self-assessment programs, as appropriate, and for assuring that implementation is completed or that appropriate justification is

provided for deviations. Verification of work product implementation and assessment of implementation effectiveness should be conducted through self-assessments to be completed by each utility. Self-assessments should:

- Ensure that all “Mandatory” and “Needed” work products or work product elements are either implemented or an appropriate justification for deviation has been approved
- Evaluate each utility's overall Materials Management program or strategy, and assess program health in terms of essential program and process elements.

Utilities are responsible for evaluating the significance of all new materials information discovered at their plants. If the information has potential generic significance, the utility shall report the information to the Chairman or Project Manager of the applicable IP(s). The communication is to occur as rapidly as possible with the objective of allowing time for the responsible IP(s) to evaluate the information in time to support the affected utility’s decisions and/or actions as appropriate.

INPO periodically evaluates utility program or implementation process effectiveness as specified in NEI-03-08.

The MAPC reviews IP implementation level assignments for consistency and generic applicability, as part of its periodic review of IP product implementation.

APPENDIX C
DOCUMENT SCREENING

1 PURPOSE

This appendix defines a screening process that may be applied by any NEI 03-08 Issue Program (IP) to determine if a new or revised work product containing aging management guidance may be generically released for implementation by IP member utilities.

2 BACKGROUND

As a means of ensuring continued safe operation of reactor plants, NRC and industry have often agreed to use the topical report submittal and approval process to address materials degradation issues in lieu of regulatory action. However, as industry continues to progress the overall state of knowledge regarding materials degradation issues relevant to light-water reactor operation, there is an increasing need to revise or replace prior guidance, some of which has received prior NRC approval via safety evaluation (SE). Since implementation of NEI 03-08, industry generally has not implemented revised or replacement guidance that is less conservative in some way than previously approved guidance without NRC approval of the guidance changes. Although beneficial in assuring that aging management guidance changes are reasonable and technically sound, use of the topical report review and approval process is often an inefficient use of limited resources, requiring both industry and NRC to expend significant effort on topical report modifications having limited or no potential for a significant adverse impact on the capability of the aging management guidance within the topical report to provide reasonable assurance of continued safe operation. The screening process contained in this appendix is intended to alleviate this issue by providing IPs with a method that may be used to determine when revised or replacement guidance may be implemented without NRC review and approval.

3 APPLICABILITY

This screening process is applicable to revised and new work products prepared by IPs identified under the NEI 03-08 Materials Initiative (those IPs listed in Appendix A of this initiative document) containing guidance that either directly or indirectly affects aging management.

This process is intended to be applied in the context of U.S. licensing and is directly applicable only to U.S. licensed reactors operated by EPRI IP member utilities.

4 DEFINITIONS

<u>Applicability Evaluation:</u>
Process for determining if screening is applicable to an NEI 03-08 IP product (described in Section 5.1).

<u>Generic Release for Implementation</u>:
A determination that a new or revised IP product can be generically released for implementation means that there are no generic limitations preventing implementation by IP member utilities. However, each site is responsible to review its site-specific licensing and design bases, license renewal commitments, and inservice inspection (ISI) program relief requests and alternatives to

ensure that there are no plant-specific limitations that would preclude immediate implementation of portions or all of the new or revised guidance in the product.

IP Controlled Aging Management Guidance:
Guidance that can either directly or indirectly affect aging management of a SSC. To be IP controlled, the aging management guidance must also be in addition to existing regulation or ASME Code requirements.

Screening:
Process for determining if aging management guidance contained in an NEI 03-08 IP work product may be generically released for implementation by member utilities without NRC approval.

SSC:
System, Structure, or Component

Product:
The term “product(s)” or “work product(s)” is used in this appendix to mean those documents issued by the IPs to their members prescribing requirements, recommendations, or guidelines.

5 DOCUMENT SCREENING PROCESS

Sections 5.1 and 5.2 describe the process to be used to determine when an IP may direct member utilities to generically implement new or revised aging management guidance contained in work products without NRC approval.

Section 5.1 provides guidance for determining if a screening evaluation is applicable to an IP work product. The decision steps provided in Section 5.1 are intentionally limited in complexity, relating primarily to the product's intended use and status. The evaluation described in Section 5.1 can generally be performed without a detailed understanding of plant design, component function, degradation phenomena relevant to reactor primary systems, materials-related operating experience, or the details of the aging management program elements recommended within the product.

Section 5.2 provides guidance for a screening evaluation based on the details of the aging management element changes recommended within the IP product. The evaluation described in Section 5.2 must be performed by an individual having a fundamental understanding of component function, relevant degradation modes, fleet operating experience, component capability to tolerate degradation, and the capability of the inspection methods prescribed in the guidance to detect and characterize relevant degradation.

5.1 Applicability Evaluation

Figure 1 provides a set of decision steps that may be used by an IP to determine if screening is required prior to generically releasing the product for implementation. Table 1 provides an amplification of the decision steps shown in Figure 1, along with additional relevant implementation instructions and notes.

In the case that decision steps (1a) through (1e) in Figure 1 all result in YES answers, detailed screening as described in Section 5.2 is needed if the product is implemented by IP member utilities without NRC approval via SE.

If one or more of the decision steps in Figure 1 results in a NO answer, the product may be generically released for implementation without NRC approval without a screening evaluation.

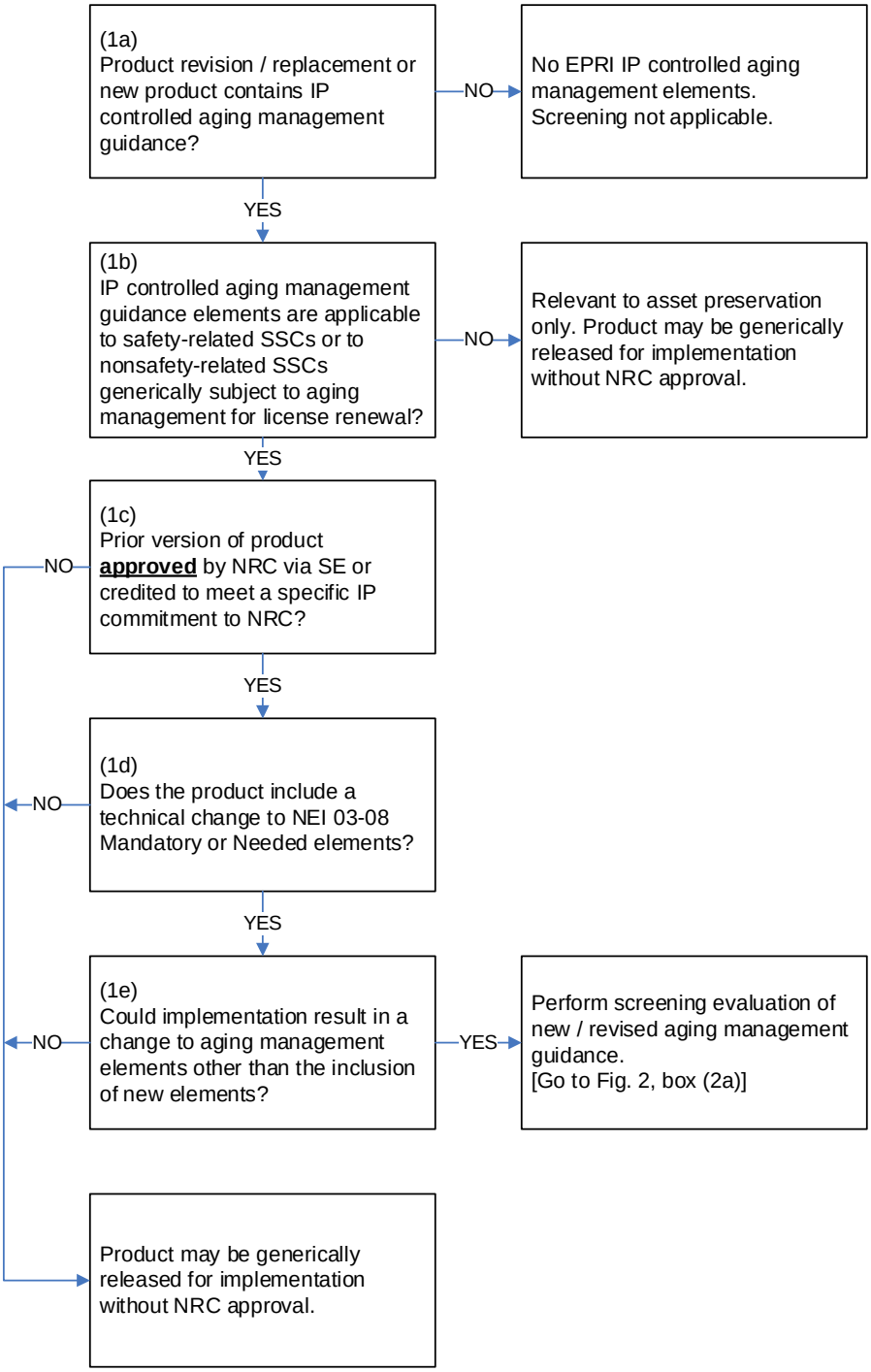

Figure 1: Applicability Evaluation Process

Table 1: Implementation Guidance for Use of Figure 1, Applicability Evaluation Process

Implementation Guidance	Technical Basis / Discussion
(1a) IP product revision / replacement or new product contains IP controlled aging management guidance?	The document screening process is applicable only when the IP product contains IP controlled aging management guidance – defined as guidance meeting the following conditions: 1) Guidance represents an augmentation of Regulatory or ASME Code requirements.[1] 2) Guidance can affect aging management activities, either directly or indirectly.[2] If the answer to (1a) is NO, then the product does not contain any IP controlled aging management elements. Submittal to NRC for approval via SE is not required. If the answer to (1a) is YES, proceed to question (1b).
(1b) IP controlled aging management guidance elements are applicable to safety-related SSCs or to nonsafety-related SSCs generically subject to aging management for license renewal?	Changes to aging management elements applicable only to SSCs not subject to aging management for license renewal cannot have an adverse impact on nuclear safety. Expanding the scope of components considered in this step to include SSCs generically subject to aging management for license renewal ensures that aging management guidance changes relevant to nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety-related function is conservatively evaluated.[3] If the answer to (1b) is NO, then product applicability is limited to asset preservation. Submittal to NRC for approval via SE is not required. If the answer to (1b) is YES, proceed to question (1c).

[1] If aging management implementation is ultimately controlled by regulation or by ASME Code, then the IP is not the governing organization and changes to aging management elements must be adopted outside the IP's NEI 03-08 implementation process.

[2] Direct aging management guidance elements include inspection method, scope, frequency, sample size, scope expansion requirements, supplemental examination requirements, evaluation methods and acceptance criteria. Indirect aging management guidance elements are those which support application of direct elements. Examples of indirect aging management elements include crack growth rate and fracture toughness correlations used for flaw evaluations and criteria for inspection relief related to mitigation status.

[3] A determination of components "generically" subject to aging management can be based on either NUREG-1801, Generic Aging Lessons Learned (GALL) Report or NUREG-2191, GALL Report for Second License Renewal.

(1c) Has ANY prior version of the product been approved by NRC via Safety Evaluation (SE) or is the product a direct replacement for guidance previously approved by NRC via SE? **Does the product contain guidance credited to meet a specific IP commitment to NRC?**	In the case of multiple revisions to an IP product, this decision step is not limited to the immediately preceding revision. If ANY prior version of the product was approved by NRC via safety evaluation, answer this question "YES" and proceed to question (1d).[4] In the case of a new product, if the product directly replaces prior guidance that was approved by NRC via SE, answer this question "YES" and proceed to question (1d). Although not common, in lieu of explicit NRC approval via SE, it is possible that an IP may commit to specific aging management guidance elements as part of interactions with NRC. Such aging management guidance elements should be treated similar to guidance approved by NRC via SE. Answer this question "YES" and proceed to question (1d). If the answers to these questions related to prior NRC SE and IP commitment to NRC are both NO, the product may be generically released for implementation.
(1d) Does the new or revised product include a technical change to NEI 03-08 Mandatory or Needed elements? [5]	Each IP is responsible for categorizing aging management elements as Mandatory, Needed, or Good Practice. Aging management elements that are deemed to be significant with regard to ensuring adequate management or to have risk significance are categorized by IPs as either Mandatory or Needed elements. If the answer to this question is YES, proceed to question (1e). If the answer to this question is NO, the revised or new product is not risk significant and may be generically released for implementation.

[4] In some cases, IP products containing aging management guidance that is more conservative than that approved by SE are implemented without submittal of the revised aging management guidance to NRC for approval via SE. This decision step ensures that all aging management guidance previously approved by NRC via SE is subjected to the significance decision steps provided in (1d) and (1e).

[5] See Section 3 of NEI 03-08, Revision 2.

(1e) Could implementation of the aging management guidance contained in the product result in a change to aging management elements other than the inclusion of new elements?	For any product revision that does not clearly result in equivalent or more conservative aging management guidance than that previously approved by NRC, screening evaluation in accordance with Section 5.2 must be performed if the product is not submitted to NRC for approval via SE. Go to Figure 2, evaluation step (2a). If the answer to this question is NO, NRC approval via SE is not required prior to generic release for implementation.[6]

[6] Although not required, an EPRI IP may still choose to submit a new or revised topical report for NRC review and approval.

5.2 Screening Evaluation

Figure 2 provides a process that should be applied to IP products determined to require screening based on the applicability evaluation performed consistent with Section 5.1. Table 2 provides an amplification of the decision steps shown in Figure 2, along with additional relevant implementation instructions and notes.

Within an IP work product, aging management element changes may be dispositioned independently if so desired. Further, if deemed appropriate by the IP, products may be generically released with instructions for partial implementation until such time as an NRC SE is received for any changes to aging management elements determined to require NRC approval prior to implementation. As such, the screening steps provided in Figure 2 and Table 2 are focused on aging management elements instead of IP products.

The screening evaluation steps described in this section should be performed by a qualified individual having a fundamental understanding of component function, relevant degradation modes, fleet operating experience, component capability to tolerate degradation, and the capability of the inspection methods prescribed in the guidance to detect and characterize relevant degradation.

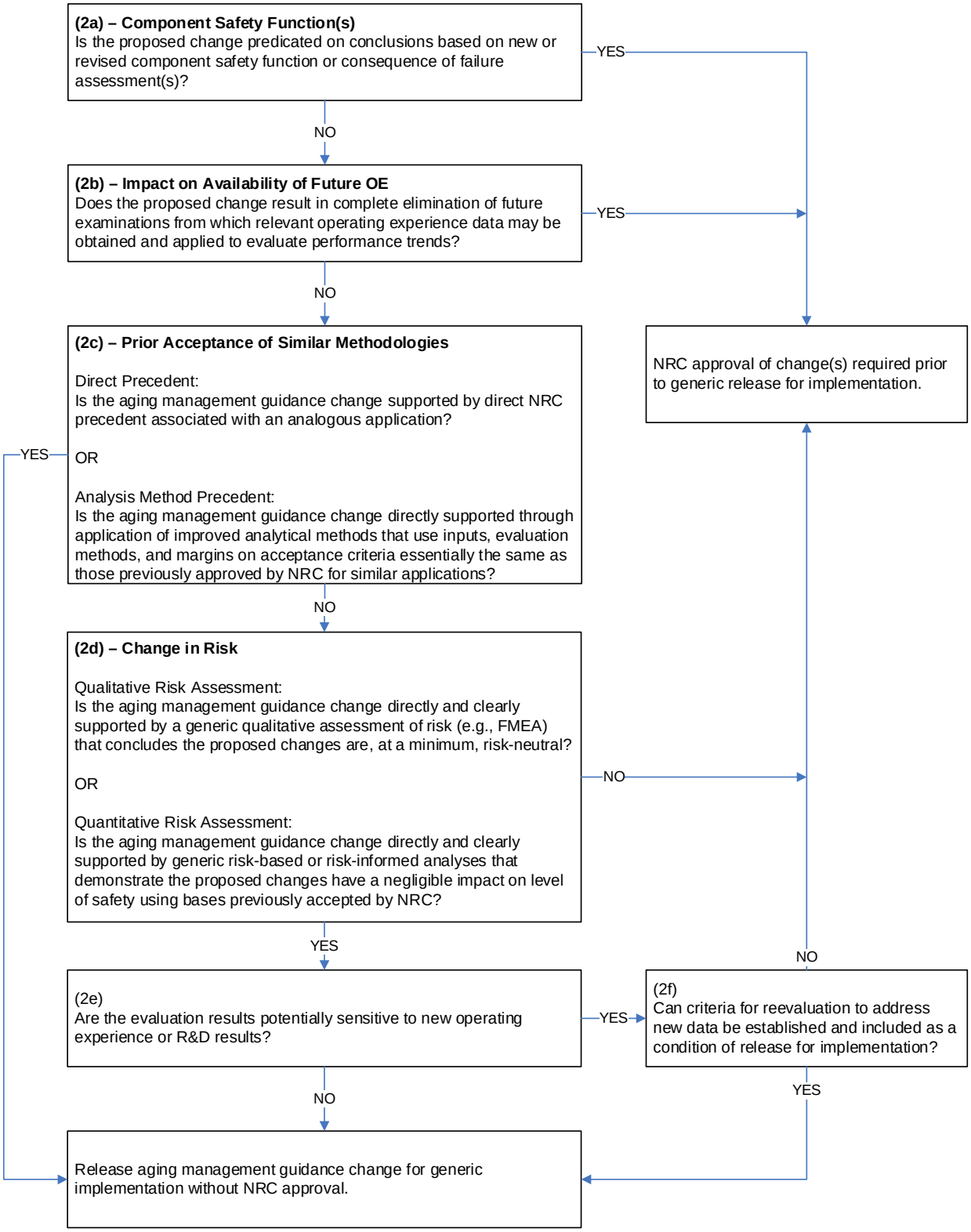

Figure 2: Screening Evaluation Process

Table 2: Implementation Guidance for Use of Figure 2, Screening Evaluation Process

Implementation Guidance	Technical Basis / Discussion
(2a) Component Safety Function Assessment	Changes to aging management elements that are predicated on new or revised assessments of component safety function or deterministic consequence of failure assessments are conservatively considered to represent changes that require NRC approval prior to generic release for implementation.
(2b) Impact on Availability of Future OE	A key feature of a robust aging management program is evaluation and appropriate incorporation of new knowledge related to materials degradation. Fleet inspection data is particularly valuable in assessing performance trends. Where component locations previously inspected by an aging management program are removed from future inspection scope without identification of reasonable surrogate locations remaining in the population of components inspected (whether in individual plants or within the fleet at large)[7], it is reasonable to obtain NRC approval prior to implementation.

[7] Appropriate surrogate locations may be fleet-based (i.e., surrogate locations need not be defined on a plant-specific basis).

(2c) Prior Acceptance of Similar Methodologies	Prior acceptance by NRC may be used in at least two ways: <u>Direct Precedent</u>: When prior approval from NRC via SE for an aging management method has been received for an essentially identical application, it is reasonable to conclude that an analogous approach applied to similar components for an essentially identical purpose need not be approved by NRC prior to implementation. <u>Analysis Method Precedent</u>: In cases, work performed after generation of aging management guidance has resulted in the development of improved analysis methods that have been accepted by NRC. These NRC approved analysis methods may be applied to additional component locations to refine the recommended aging management guidance. In this case, the precedent is set indirectly (i.e., based on analysis method) rather than directly (i.e., based on specific aging management elements). For determination based on analysis method precedent, the analysis application must be consistent with the purpose and intent of the precedent analysis application. Additionally, the analytical methods, key analysis assumptions and inputs, and acceptance criteria (including applied margins to minimum acceptable values) used must be essentially the same as those used in the analysis on which the precedence evaluation is based.

(2d) Risk Assessment	If a determination cannot be reached using step 2(c), then an assessment of risk may be applied to determine if the proposed aging management guidance significantly impacts overall level of safety. Assessments of risk may be either qualitative or quantitative in nature as described below. <u>Qualitative Risk Assessment</u>: Qualitative evaluation of field inspection data and R&D program has been extensively used by IPs as bases for development of aging management guidance.[8] Evaluation of new or improved data using a similar evaluation process may be used as a basis for modification of the recommended aging management elements. The method applied should ideally be consistent with methods previously applied and either directly or indirectly accepted by NRC in that the aging management guidance resulting from use of the method were approved by NRC.[9] <u>Quantitative Risk Assessment</u>: Quantitative risk-based methods may be used to demonstrate that the proposed changes to aging management elements do not represent a significant change in risk. For the purpose of this screening process, quantitative measures of risk may be defined in any of several ways, including but not limited to, core damage frequency and conditional probability of failure. Where applied, risk calculations should apply methods that have been either explicitly approved by NRC for similar use or that apply appropriate safety margins to account for differences in professional opinion regarding appropriate input assumptions and calculational procedures. Acceptance criteria must be consistent with those accepted by NRC for similar analytical evaluations. In all applications, the intent of any NRC conditions placed on the use and acceptability of similar analysis methods and resulting aging management elements must be considered in the determination.

[8] Failure modes and effects analysis (FMEA) is an example of a routinely applied qualitative risk assessment method. Results are based on categorization of component locations based on risk of degradation or on qualitative assessment of failure consequence rather than on calculation of probabilistic values (e.g., core damage frequency or conditional probability of failure).

[9] For example, MRP-227 applied a structured failure modes, effects, and criticality analysis (FMECA) process to evaluate PWR internals and determine appropriate aging management requirements. In approving MRP-227, it is established that NRC accepts as valid the FMECA process used by MRP. In the case where new data (either based on field OE or based on completed R&D) are used as inputs to a revised FMECA, the results are deemed not to require NRC approval prior to generic release for implementation so long as the FMECA is applied in a manner consistent with that used previously which has been accepted by NRC.

(2e)/(2f) Sensitivity to New Data	If a risk assessment consistent with item (2d) is used as a screening basis, it is recognized that the evaluation conclusions could be affected by new field OE or by R&D results. In the case that changes to aging management guidance are released for generic implementation without NRC approval and such changes could be sensitive to new data, it is reasonable that criteria be established for identifying any adverse trends in performance that could warrant adjustment of the applicable aging management guidance. Criteria for reevaluation must be established and managed appropriately by the responsible IP in a manner that ensures adverse performance trends are identified and addressed in a timely manner. This requirement is consistent with the approach used to maintain risk-informed ISI programs.

5.3 Review, Approval and Documentation

For IP products determined not to require NRC approval prior to generic release for implementation based on a determination using Section 5.1, formal review and approval of the determination is not required. The determination result is documented in the letter transmitting the IP product for committee review.

For IP products determined not to require NRC approval prior to release for generic implementation based on screening evaluation using Section 5.2, the details of the screening evaluation shall be documented and provided for committee review and approval in parallel with the product. Review of the screening evaluation is performed using the same committee-based consensus process applied to the product. Review and approval of the screening evaluation by IP member utilities occurs through application of the existing process under which products containing NEI 03-08 Mandatory or Needed elements require executive body approval before implementation.[10] Final documentation of the screening evaluation details including any analyses performed to support the evaluation (not just the determination result) should be documented either as an attachment to the IP letter transmitting the report to members for implementation or as an attachment or appendix to the IP product itself.

Finally, the introduction section of all IP products containing NEI 03-08 Mandatory or Needed elements should clearly state the report implementation status. Where detailed evaluation using Section 5.2 was used to determine that the product does not require NRC approval prior to release for implementation, the introduction section should also provide a reference to the screening evaluation so that program owners implementing the aging management guidance contained in the product can access the screening evaluation details if desired.

5.4 NRC Notification

Each IP will provide an annual information only notification to NRC regarding application of the screening process. The level of detail provided is left to the discretion of the IP. The annual information notification shall be reviewed by NEI. If areas of regulatory risk are identified in the review, the IP and NEI will work collaboratively to develop appropriate communication for the annual information only notification that minimizes the regulatory risks. However, as a minimum, the notification shall include a listing of work products that, during the annual reporting period, meet all of the following criteria:

1) Include IP controlled aging management guidance elements and,
2) Represent a revision of or replacement for a product previously approved by NRC via SE and,
3) Was evaluated by the screening process described in Section 5.2 and determined not to require NRC approval prior to release for generic implementation

Further, for each report listed based on these criteria, the notification shall also include a summary statement of the basis applied by the IP to determine that the product could be released for generic implementation without NRC approval. Evaluation details need not be

[10] Aging management guidance elements that are deemed important to assuring continued safe operation will be indicated as either Mandatory or Needed elements under the NEI 03-08 Materials Initiative.

provided within the annual notification. However, evaluation details shall be maintained by the responsible IP and made available to NRC upon formal request.

PLANT APPLICATION

The process steps described in Section 5 are intended to provide IP staff or qualified evaluators with an appropriate process to determine if an IP product can be generically released for implementation without NRC approval or if NRC approval via SE is needed prior to such a release. However, plants may identify limitations within the site-specific licensing basis, NRC commitments, or plant ISI program that conflict with immediate implementation of an IP product. These limitations must be resolved on a plant-specific basis. In no case should evaluations performed consistent with this appendix be considered to supersede or replace plant-specific limitations on aging management guidance implementation.