

NEI 03-08 Appendix C Document Screening Process

Review of Intent and Use

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NEI 03-08 Materials Initiative

- Unexpected materials degradation events occurring in the late 1990s and early 2000s resulted in an acknowledgement that existing aging management guidance needed improvement
- Under the NEI 03-08 materials initiative, industry materials issue programs and all U.S. owners committed to proactive development and maintenance of aging management guidance
 - IPs defined in NEI 03-08 include EPRI (BWRVIP, MRP, SGMP, WRTC, NDE, and Water Chemistry) and PWROG (Materials Committee) programs
- Aging management guidance developed by IPs has been routinely submitted to NRC for review and approval
 - Even prior to the NEI 03-08 initiative, the BWRVIP was interacting with NRC using the topical report review and approval process

NEI 03-08 Document Screening Process

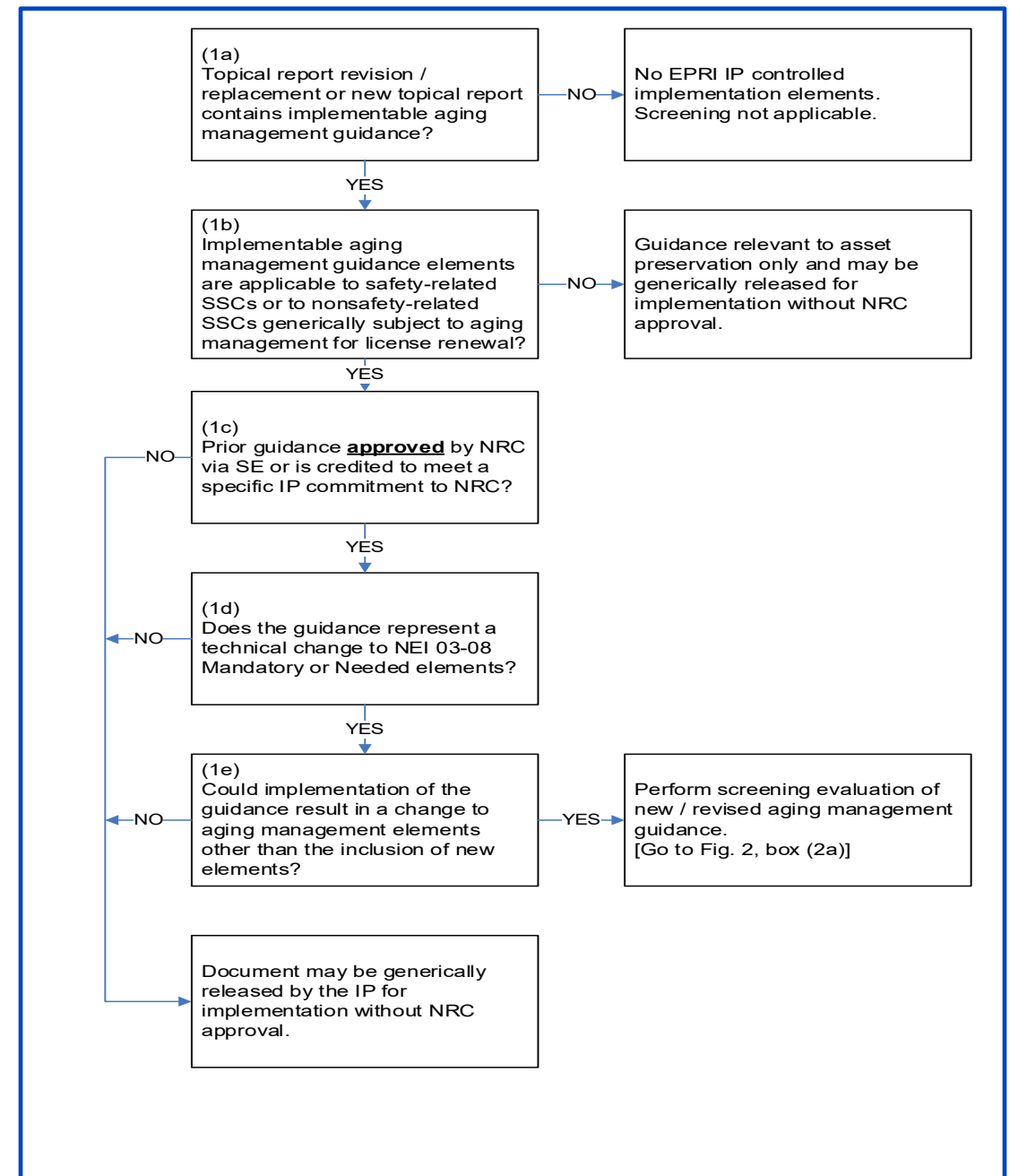
What Is It?

- Screening process conceived as a means of reducing resources applied to reviews of “low risk” changes to NEI 03-08 guidance developed by industry issue programs (IPs)
- Process provides for implementation of revisions to NEI 03-08 mandatory or needed guidance without NRC review and approval
- Added to NEI 03-08 in 2017 (Appendix C)
- Includes two steps
 - Applicability Evaluation
(Determine if screening process use is applicable to the proposed guidance revision)
 - Screening Evaluation
(Assess need for review and approval based on risk significance / regulatory precedent)

Objective = Efficient Use of Resources for Low Risk Revisions

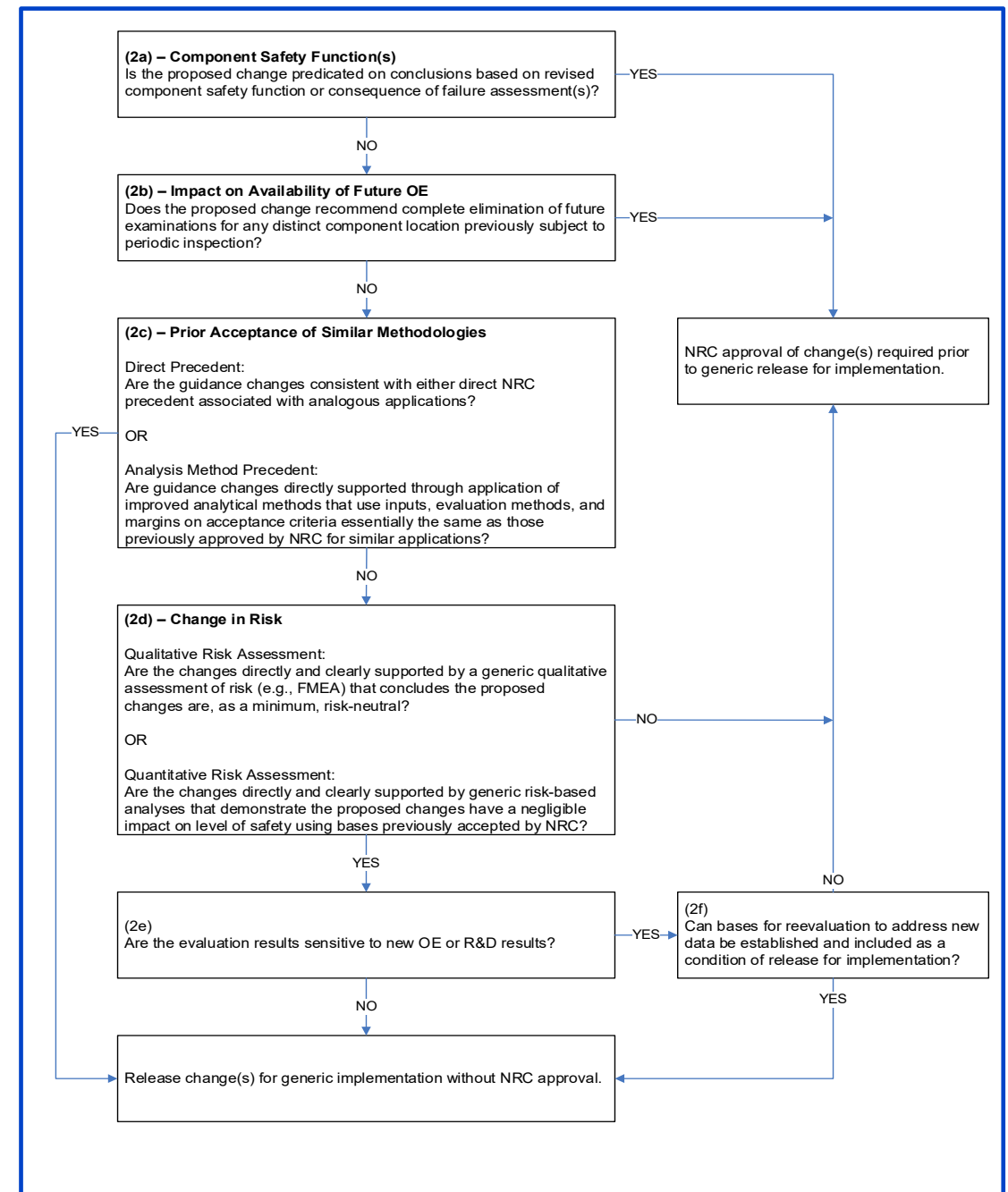
Applicability Evaluation

- Intended to be simple to apply
- Used to determine when further document screening is applicable
- Screening only applicable for reports containing IP controlled aging management guidance associated with prior NRC review and approval
- Excludes necessity of NRC review for documents not previously approved by NRC or without explicit commitments



Screening Evaluation

- Permits implementation of guidance revisions without prior review and approval for:
 - Revisions consistent with NRC precedent / prior NRC approval
 - Determinations based on qualitative risk-based evaluation, using methods consistent with those previously approved by NRC
 - Determinations based on quantitative risk-based analysis with results meeting criteria accepted by NRC



Limitations on Use

- Two general limitations on use are imposed as reasonable constraints to ensure appropriate and conservative application of document screening
 - 1) Cannot be used to screen out changes based on new or revised component safety assessments or consequence of failure assessments
 - Ensures that IPs do not eliminate examinations for locations found to require long-term actions (e.g., in BWRVIP-06 Rev. 1-A or other relevant safety assessments previously reviewed and approved by NRC)
 - 2) The impact on generation of OE appropriate to identify adverse performance trends must be considered
 - Ensures that changes to aging management guidance are not made that eliminate periodic generation of relevant field inspection data and preclude identification of adverse trends

Screening Documentation

- The introduction section of all reports containing NEI 03-08 mandatory or needed guidance should state the implementation status
- Where an applicability evaluation (simple evaluation) was used, the introduction section notes this conclusion. The details of the evaluation are documented in the IP project records.
- Where a detailed evaluation was used to screen out the topical report, the introduction section of the guidance document should provide a reference to the screening evaluation details
 - Ensures that program owners implementing the report guidance can access the screening evaluation details if desired
 - The evaluation itself may be documented either as an appendix to the topical report or in retrievable IP correspondence

Communication

- During development of the screening process, comments were solicited from both industry and NRC
- Screening process includes explicit requirements for communication of its use to NRC
 - Each NEI 03-08 IP 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 each IP
 - Must include:
 - A listing of reports previously approved by NRC via SE that have been revised or replaced using document screening
 - Summary statement regarding the screening basis used
 - Evaluation details may be provided to NRC upon request
- Informal communication assumed
 - It is expected that all NEI 03-08 IPs will continue to communicate with NRC in a transparent manner regarding application of document screening

Main Use of Screening Process to Date

- Most significant uses are related to changes to BWRVIP inspection and flaw evaluation (I&E) guidance
- Around 2010, the BWRVIP began to consider optimization of I&E guidelines based on collection and evaluation of field inspection data
 - Based on the current state of knowledge, it is clear that initial I&E guidance was very conservative and cases exist where relative IGSCC risk is different than concluded in initial susceptibility evaluations
 - Initial guidance provided limited credit for HWC implementation, guidance revisions in some cases appropriately expand credit for HWC

Main Use of Screening Process to Date (cont'd)

- After initial NRC approvals for revisions to guidance for core spray internals (BWRVIP-18) and jet pump assemblies (BWRVIP-41), revisions to other I&E guidelines using a similar approach and supported by detailed evaluation of field inspection data have been implemented using document screening (BWRVIP-180 Rev. 1, BWRVIP-48 Rev. 2)
- Screening evaluations typically have a much greater level of detail and analysis rigor than the technical bases associated with initial issue of guidelines
- Approach consistent with approaches used previously for NRC approved guidance revisions
 - All revisions supported by extensive collection and analysis of field inspection data
 - Changes to inspection program requirements are guided by qualitative risk evaluation (*using elements of FMEA*)

Future Plans

- Industry intends to continue to use the screening process as appropriate for revisions of aging management guidance
- Screening will be used in a conservative manner – only applied where there is a strong basis for acceptable screening
- However, it is anticipated that requests for review and approval using the topical report evaluation process will continue since it is known that for some planned revisions to guidance, the screening criteria likely cannot be met
 - Example: BWRVIP-138 Rev. 2, I&E Guidance for Jet Pump Holddown Beams

A blue-tinted photograph of four people, two men and two women, standing together. They are dressed in professional attire, including lab coats and a hard hat. The image is overlaid with a semi-transparent blue filter. The text 'Together...Shaping the Future of Energy®' is centered over the image in white.

Together...Shaping the Future of Energy®

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