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Recommendations for the NRC's Generic Issues Program

EMBARK Venture Studio &
Office of Research (RES)

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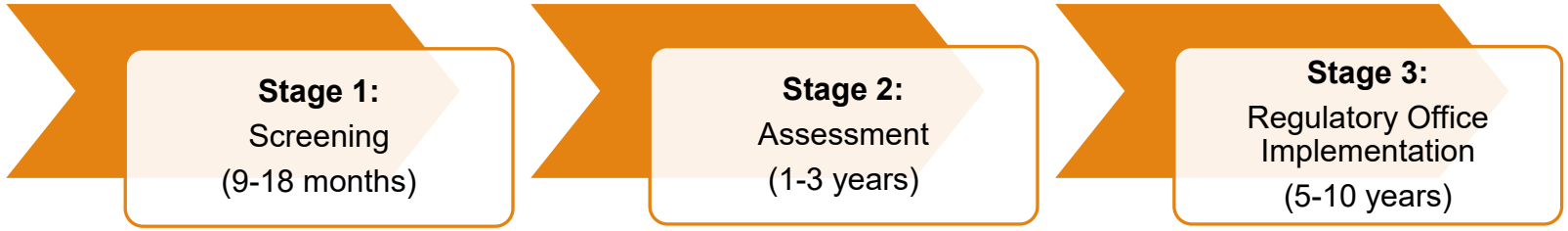
What is the Generic Issues (GI) Program?

Definition of a GI:

Issue involving public health and safety, the common defense and security, or the environment that could affect multiple entities under NRC jurisdiction

GI Program (Housed in RES):

- NRC's approach to complying with the 1974 Energy Reorganization Act's requirement to document & track resolution of GIs



- Issue resolution may involve new or revised rules or guidance that affect nuclear power plant licensees, nuclear material certificate holders, or holders of other regulatory approvals

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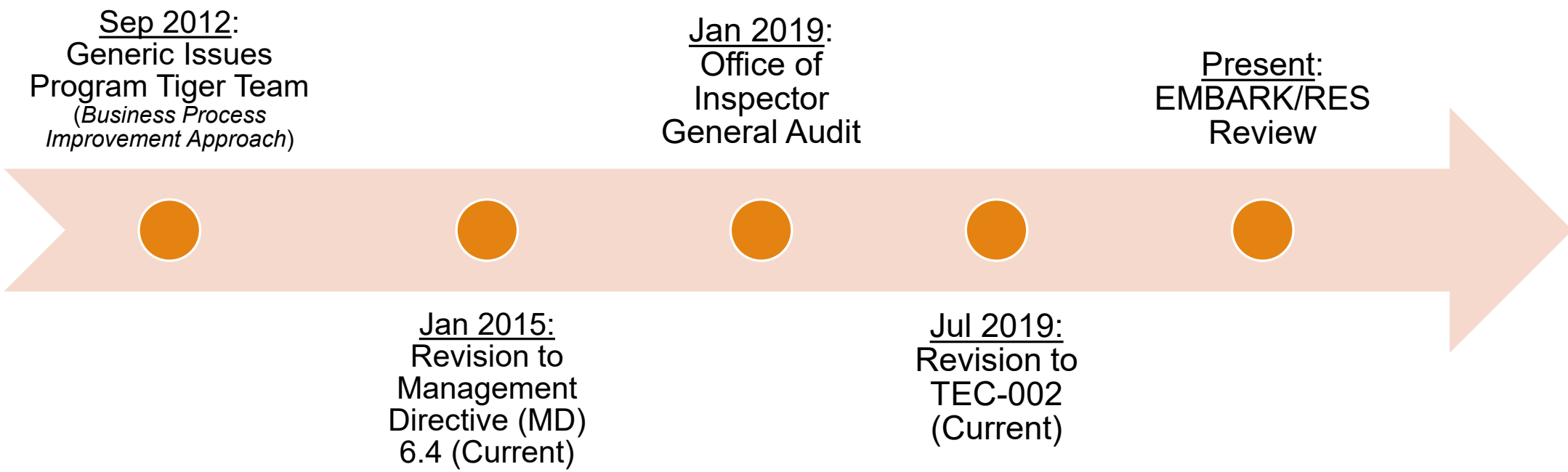
Recent Modifications to the GI Program



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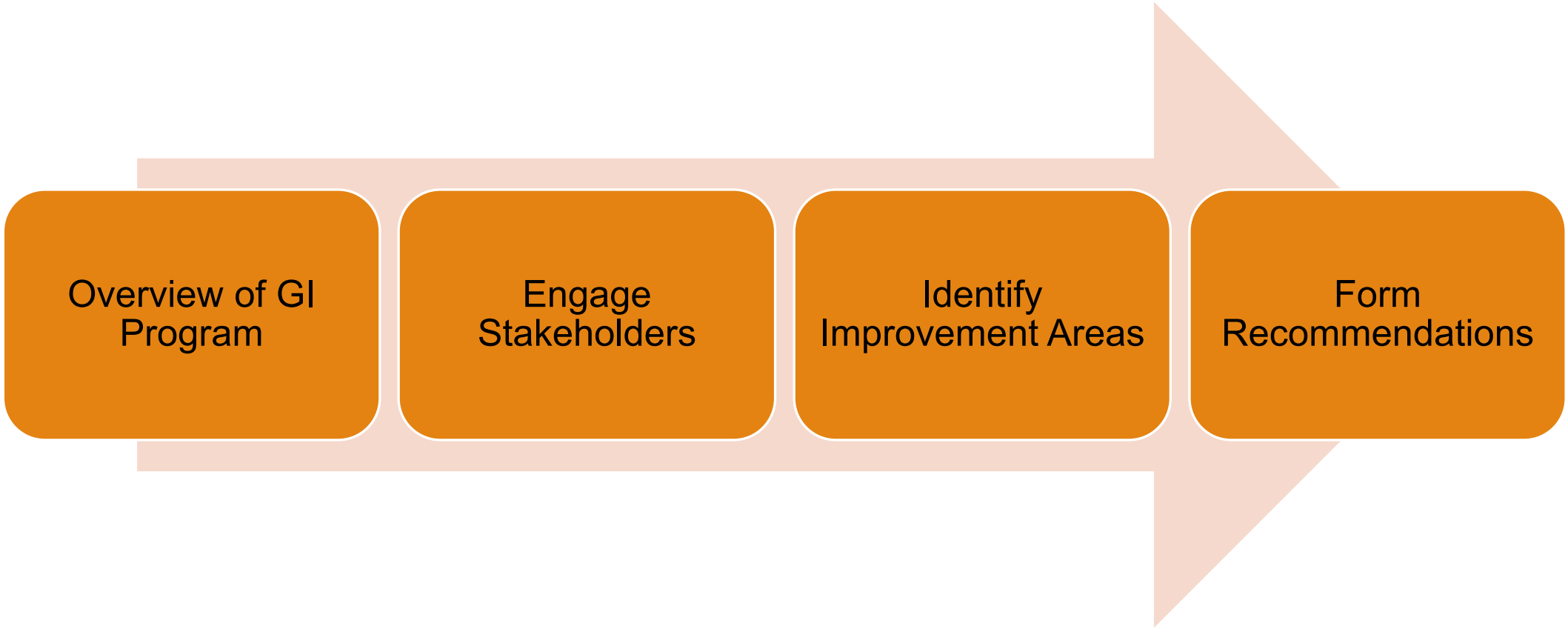
Review Methodology



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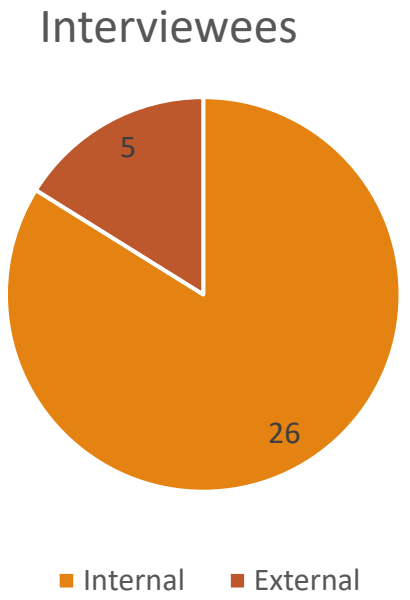
Stakeholder Interviews / Improvement Areas

- Conducted 31 open-ended interviews to gain a well-rounded perspective sample:

"Reasonable, functional program that serves its purpose with **some areas for improvement"**

Pros	Cons (Improvement Areas)
7 screening criteria in Stage 1, "Screening"	Timeliness and lack of decision-making in Stage 2, "Assessment"
GI Program Dashboard / Supplements to NUREG-0933, "Resolution of Generic Safety Issues"	Potential for better use of regulatory tools for information gathering
Technical engagements between NRC/external stakeholders	Increase application of risk
	Perception of inefficiency compared to other agency processes



External:
Electric Power Research Institute;
Nuclear Energy Institute (NEI);
Organization for Economic Co-operation and Development, Nuclear Energy Agency;
Southern Nuclear; Union of Concerned Scientists

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Four Recommendations

Annual Evaluation in Assessment Stage

Best Practices for Information Gathering

Team of Experts to Screen Generic Issues

Consistency in MD 6.4 and TEC-002

Recommendation #1: Annual Evaluation in Stage 2, “Assessment”

Purpose: Improves the **timeliness** and **efficiency** of the program

- Assess whether the issue should stay/exit the GI Program
- Management oversight
- Clear goals and timelines towards issue resolution

Annual Assessment Process:

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Annual Evaluation Worksheet

Questions:

1) Does the issue still affect public health and safety, the common defense and security, or the environment?

2) Is continued operation acceptable?

3) Can the research required to complete the assessment be completed in a timely manner? If no, would a long-term study or experimental research be required to establish the risk or safety significance?

4) Are there clear goals and timelines for the resolution of the generic issue? Be specific on dates, goals, resources, and perceived challenges.

5) Does the updated understanding of the qualitative and quantitative risk warrant continued expenditure of agency resources? Criteria from TEC-002, Appendix B, “Risk Criteria” can be used to assess implications to safety.

6) Is there another regulatory process better suited to address the issue without the need for further assessment?

7) Should this issue remain in the Generic Issues Program?

Recommendation #2: Best Practices for Information Gathering

Purpose: Leverage different avenues to gain and seek further understanding of information required to resolve generic issues

Information exchanges with independent entities and/or licensees

Bulletin

50.54(f)

Generic Letter

Existing regulatory tools to formally request information from licensees

Recommendation #3: Team of Experts to Screen Generic Issues

Purpose: Formalize the practice of engaging with subject matter experts in the Screening stage

- Depending on the issue, the project manager may not always have the technical knowledge to make the screening determination
- Ensures proper technical expertise is applied to the screening decision

Recommendation #4: Consistency in MD 6.4 and TEC-002

1. Enhance TEC-002 to consider how risk significance is influenced by uncertainties and assumptions in the risk analysis

2. Multiple additional editorial revisions between MD 6.4 and TEC-002

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Next Steps

- Continue NRC Concurrence of Proposed Changes
- Issue Public Report
- Revisions to MD 6.4 and TEC-002

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Questions

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BACK UP SLIDES

Submitting a Proposed GI

NRC staff and members of the public can submit a proposed GI through the NRC public website or by emailing a NRC Form 833 to GIP.Resource@nrc.gov.

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Status & Progress of GIs

- Public Generic Issues Dashboard reports the status and progress of ongoing and closed issues
- Semi-Annual Generic Issue Management Control System reports capture the status of active issues
- Supplements to NUREG-0933, "Resolution of Generic Safety Issues" document the resolution of all resolved GIs and the assessment of work remaining on unresolved GIs

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7 Screening Criteria of the GI Program

1. The issue affects public health and safety, the common defense and security, or the environment (with respect to radiological health and safety). For issues that are not amenable to quantification using risk assessment, qualitative factors may be developed and applied as necessary to assess safety/risk significance.
2. The issue applies to two or more facilities and/or licensees/certificate holders, or holders of other regulatory approvals.
3. The issue is not being addressed using other regulatory programs and processes; existing regulations, policies, or guidance.
4. The issue can be resolved by new or revised regulation, policy, or guidance.
5. The issue's risk or safety significance can be adequately determined in a timely manner (i.e., it does not involve phenomena or other uncertainties that would require long-term study and/or experimental research to establish the risk or safety significance).
6. The issue is well defined, discrete, and technical.
7. Resolution of the issue may involve review, analysis, or action by the affected licensees, certificate holders, or holders of other regulatory approvals.

Office Instruction, TEC-002, Appendix B, "Risk Criteria"

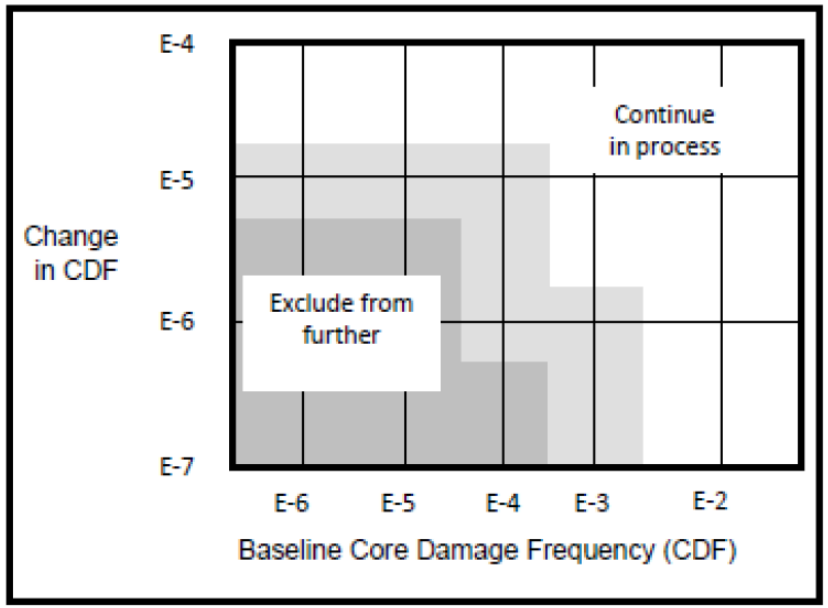

Figure B-2 Core damage frequency (CDF) criteria for the GI Program

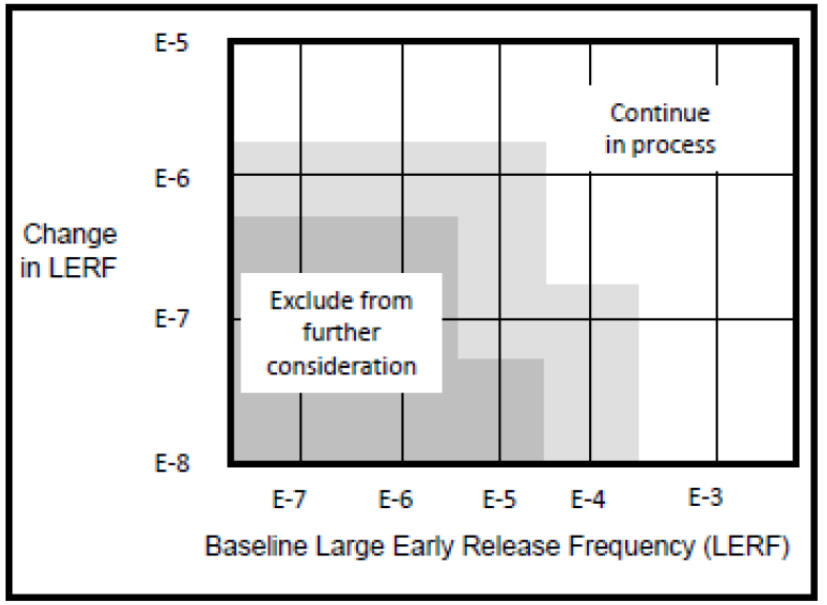

Figure B-3 Large early release frequency (LERF) criteria for the GI Program

Figures Based On: Regulatory Guide 1.174, Revision 3, "An Approach for using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"