Current Status of Low Safety Significant Issue Resolution (LSSIR)

Office of Nuclear Reactor Regulation

Public Meeting

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U.S.NRC
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Protecting People and the Environment

Presentation Purpose

Provide current status of LSSIR effort and draft working group recommendations

Background

- The LSSIR Working Group (WG) looked at previous tasks to identify underlying root cause themes
- The intent was to:
  - Identify in current processes where enhancements could be made, and
  - Identify any new processes that might mitigate these situations
- The themes correlated with the time period:
  - Reflect the mindset prior to recent efforts to enhance backfit policy and guidance
- The following are draft recommendations intended to address the major areas

Inspection Manual Chapter

Low safety significant (LSS) issues can be addressed in current inspection guidance, but there is a tendency to drive issues to closure even in view of the low safety significance and high resource expenditure:

- The WG concludes that the most efficient means for addressing LSS issues arising is early on, during inspection
- Inspection Manual Chapters (IMCs) could be revised to enhance issue screening and support documentation for LSS issues (under the constraints below)
- These enhancements to the IMC would be to provide an improved structure to support closure of LSS issues where the following exists:
  - The licensee concludes it is not within the licensing basis (LB)
  - The NRC, after a nominal effort, has not produced facts that dispute the licensee's conclusion on its LB
  - The NRC determines the safety significance is low
  - The NRC determines additional resources will not be expended to continue to challenge the licensee's conclusion (i.e., the NRC determines it is better to focus resources on more safety significant activities)
  - The facility can be left "as is" (observations to be provided to the licensee for its discretion to address)
  - The NRC can document closure of the LSS issue

Licensing Review

LSS issues arise during licensing reviews both in terms of the LB and in terms of requested forward fits:

- Issues have arisen during reviews concerning the adequacy of the LB:
  - Such issues would be addressed in a similar manner as envisioned for the IMC
- There is also potential to enhance and improve NRC headquarters procedures that govern (but are not limited to) license amendment reviews to address "forward fits"
- Most issues that arise during licensing reviews are "forward fit" situations
  - This is where the NRC wants to condition its approval on the licensee upgrading its approach to addressing a requirement
  - By its nature forward fits are clearly outside the existing LB
  - Use of LSSIR in this context would be to assist in more efficiently addressing "forward fits" from a safety significance perspective
  - For example: If it can be readily determined that there is little to no safety or security enhancement associated with the forward fit, the staff would not pursue it
- Final Management Directive (MD) 8.4 may impact this, so use of LSSIR for forward fits depends on the final MD 8.4 (NRC backfitting policy)

Backfitting and Licensing Basis

A theme for previous issues was the evidence of the pre-2017 mindset for backfitting, including consideration of the licensing basis in that context:

- Ongoing efforts to update and enhance the backfitting policy and guidance, supported with training for NRC staff and management, have been beneficial for addressing LSSIR
  - Previous training occurred in late 2017 (“reset”) and in mid-2018 (“workshop” training) and included both backfitting and licensing basis
  - Following issuance of final MD 8.4 and revised NUREG-1409, longer term training (permanent) will be put into place
- The WG expects that these changes and the associated longer term training will continue to benefit the efforts to address LSS issues

Safety Significance Determination - General Tenets of Development

- Rely on the well-established principles of integrated decision-making
- Drive an integrated team approach
- Be flexible enough to handle different situations
- Allow use of different existing tools/approaches
- Let the circumstances and the team's expertise dictate the best combination of approaches
- Get to a well-founded determination at a reasonable level of effort

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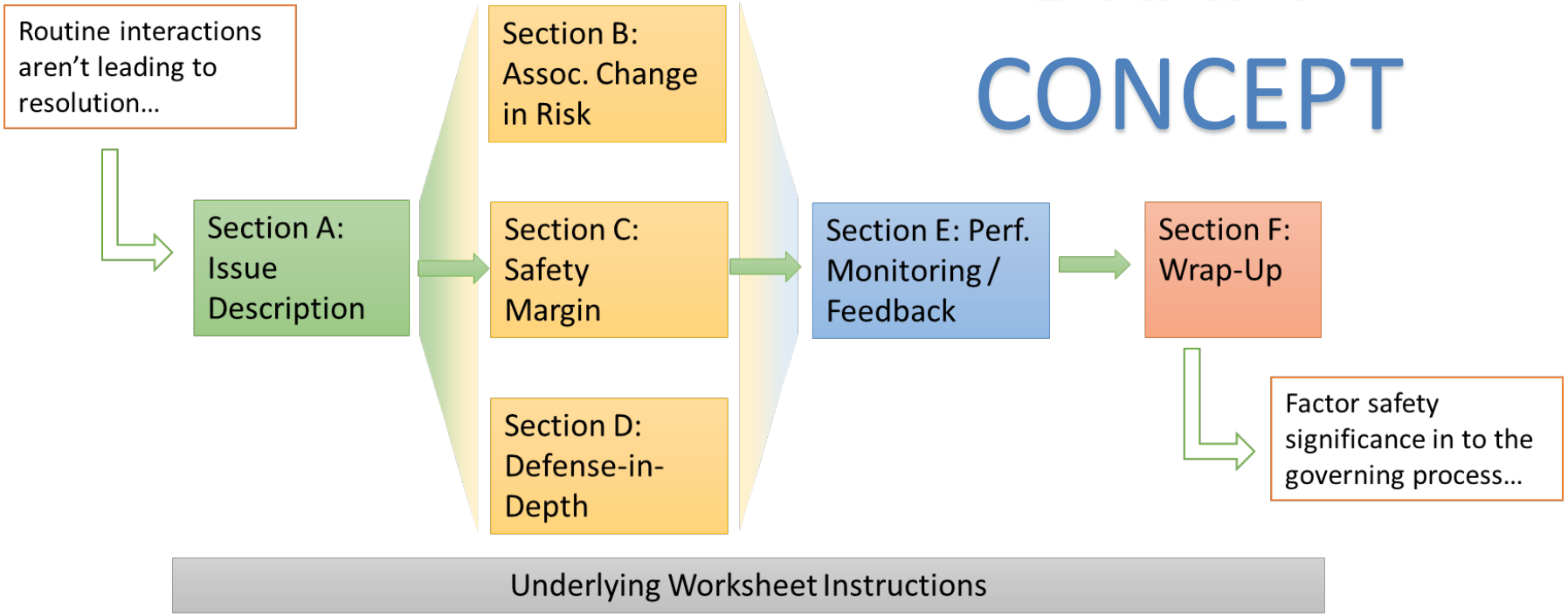
Worksheet flow follows IDM principles

DRAFT CONCEPT



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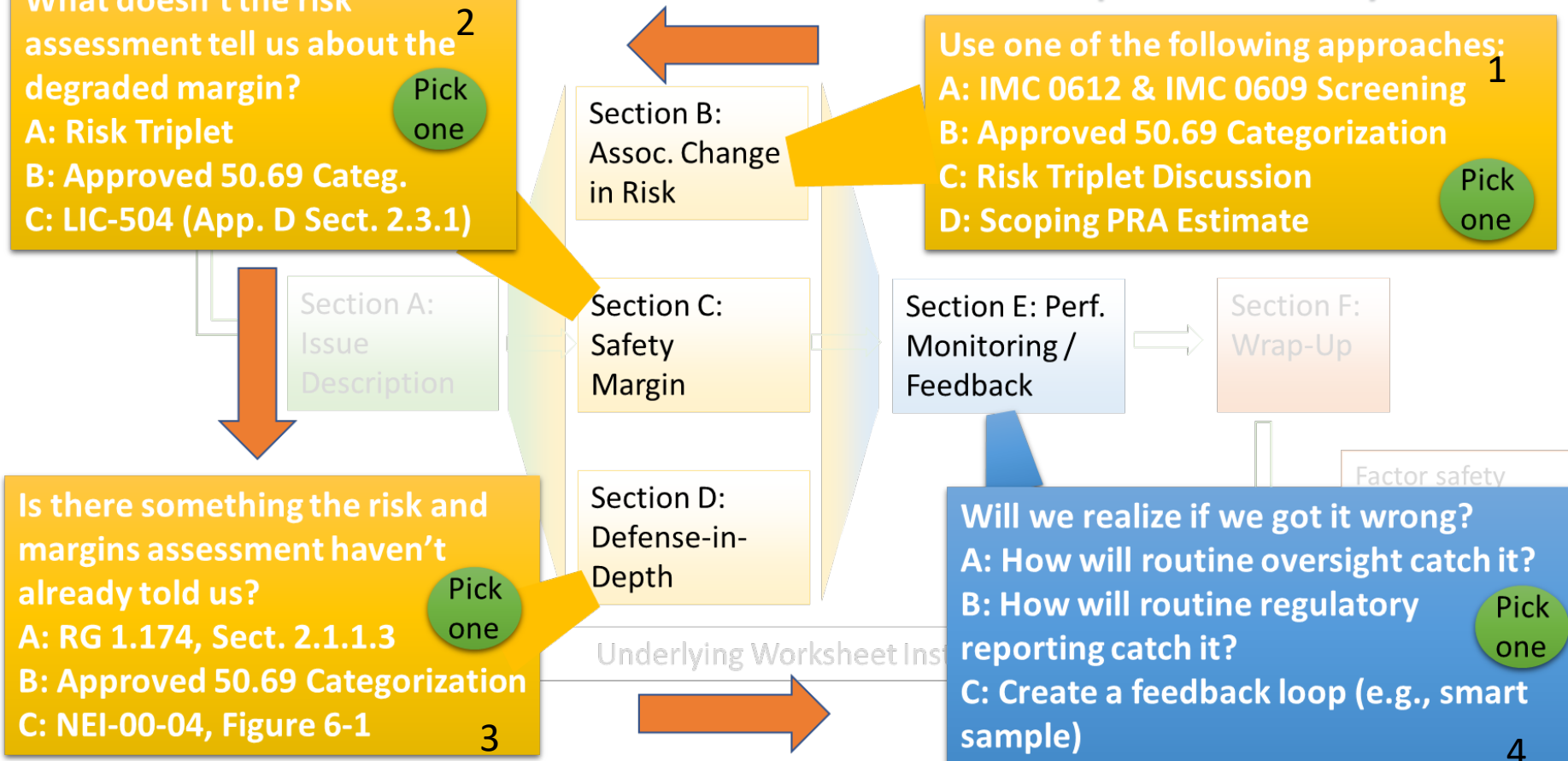
Each IDM principle has a menu of approaches

DRAFT CONCEPT – All details are preliminary



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Other Enhancements

- Task Interface Agreement (TIA) effort will be discussed this afternoon:
  - Includes the LSSIR approach as part of the new process
- Improved decision-making:
  - The theme that contributed to a lack of timely decisions
  - Efforts are underway to improve decision-making (including both risk-informed decision-making and addressing a range of views)
  - These efforts will benefit all agency activities but should be particularly beneficial for the complex and often challenging issues typically encountered in backfit and licensing basis
- Conforming changes to the Enforcement Manual (as necessary):
  - If needed, these changes would provide greater clarity to support disposition of LSS issues within traditional enforcement
- Training for staff and management (i.e., beyond backfitting and licensing basis):
  - Training of staff and management to implement LSSIR
- Organizational expectations:
  - Staff and management expectations to implement LSSIR

Thank You