



# Clarifying the Decision Making Process for Recommendation 2.1 on Flooding and Clarifying Relationship Between Recommendations 2.1 and 4 (SBOMS)

**July 24, 2014**

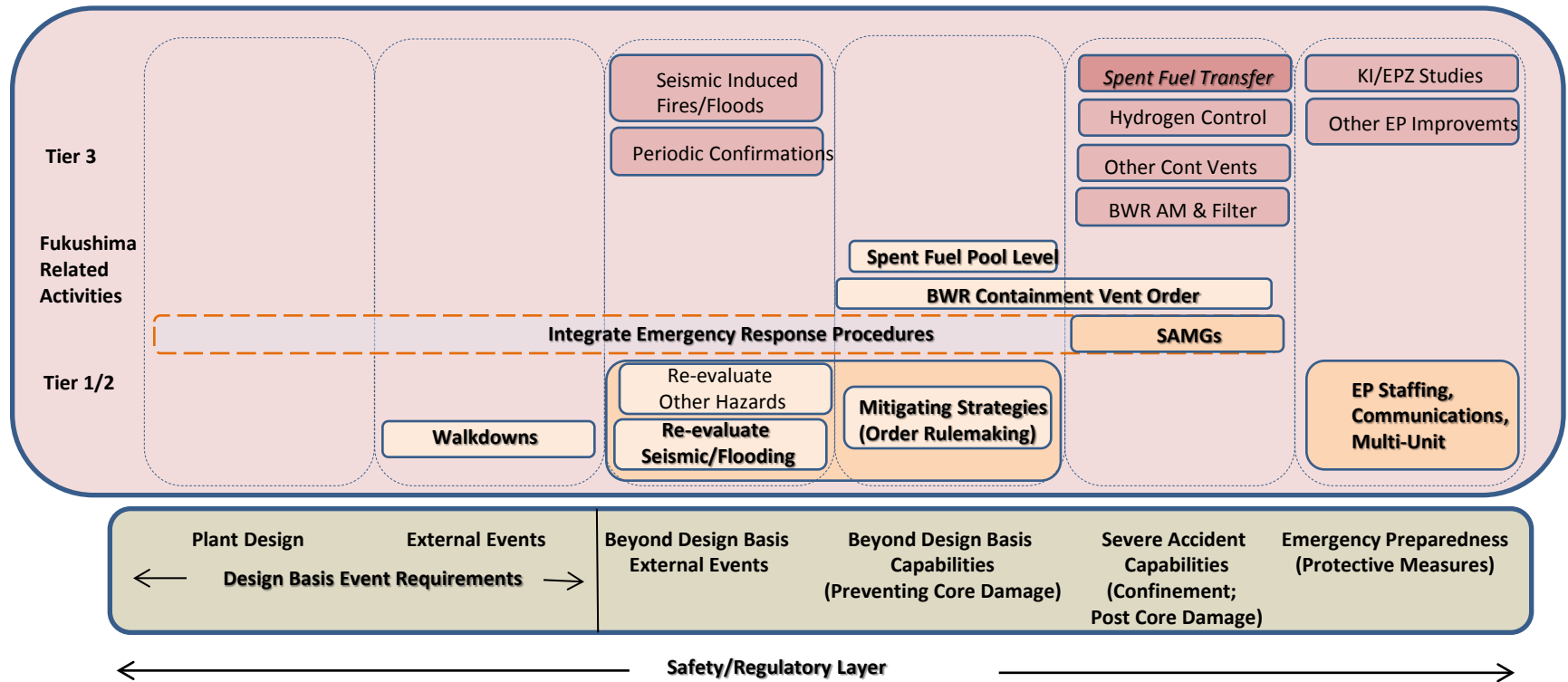


# Background

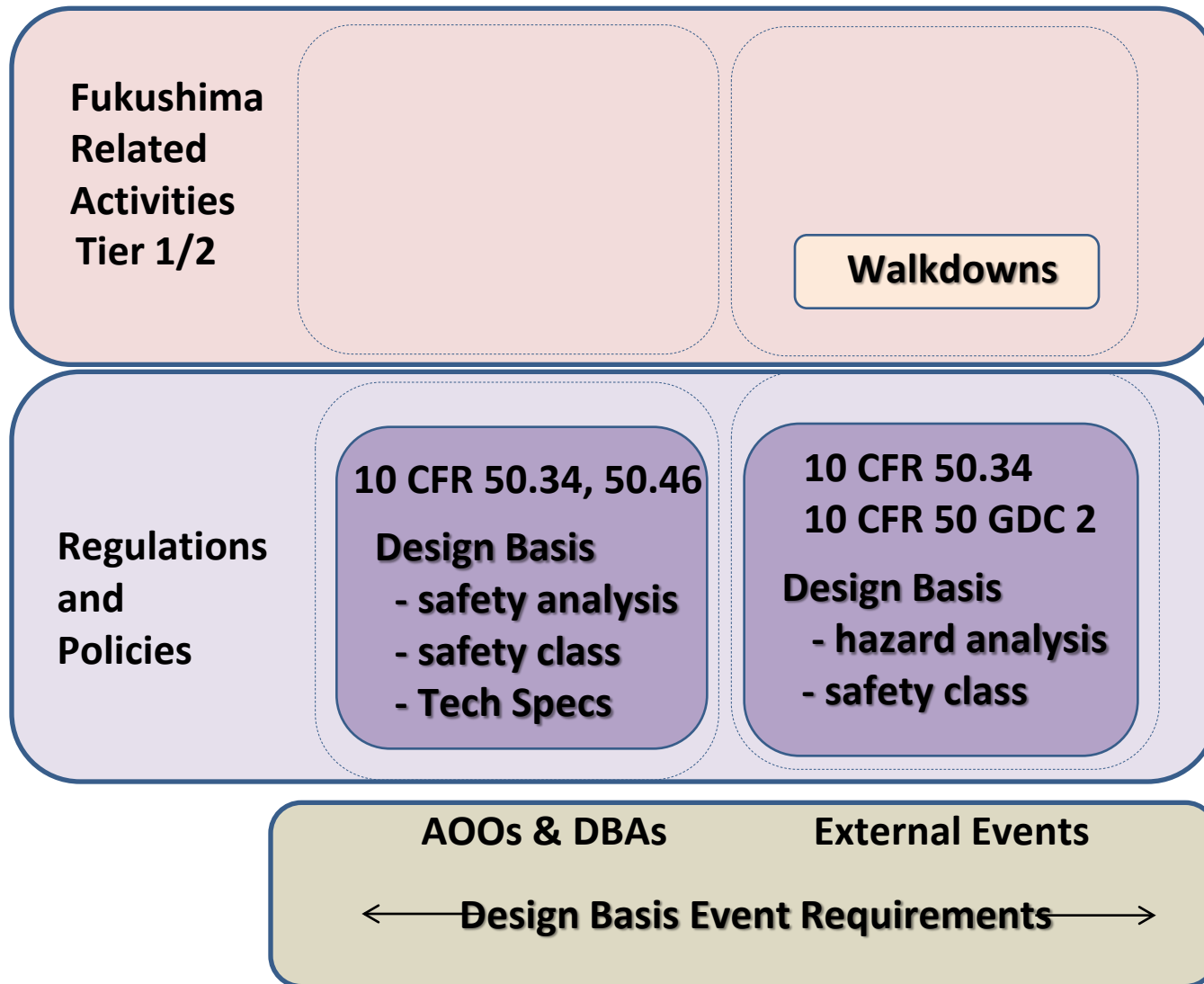
- Re-evaluation of external hazards, in particular the integrated assessments for flooding, and the mitigating strategies have progressed as related but largely separate activities
- Need for mitigating strategies equipment to be protected against re-evaluated hazard reflected in regulatory basis for station blackout mitigating strategies (SBOMS) rulemaking and other documents
- Relationships recognized but some issues not resolved – pending “Phase 2” of the NNTF Recommendation 2.1 activities for flooding (determining regulatory actions)
- Paper being prepared to clarify Phase 2 decision-making process and relationships and improve efficiency and effectiveness of processes, improve integration of activities into overall Fukushima response plan going forward



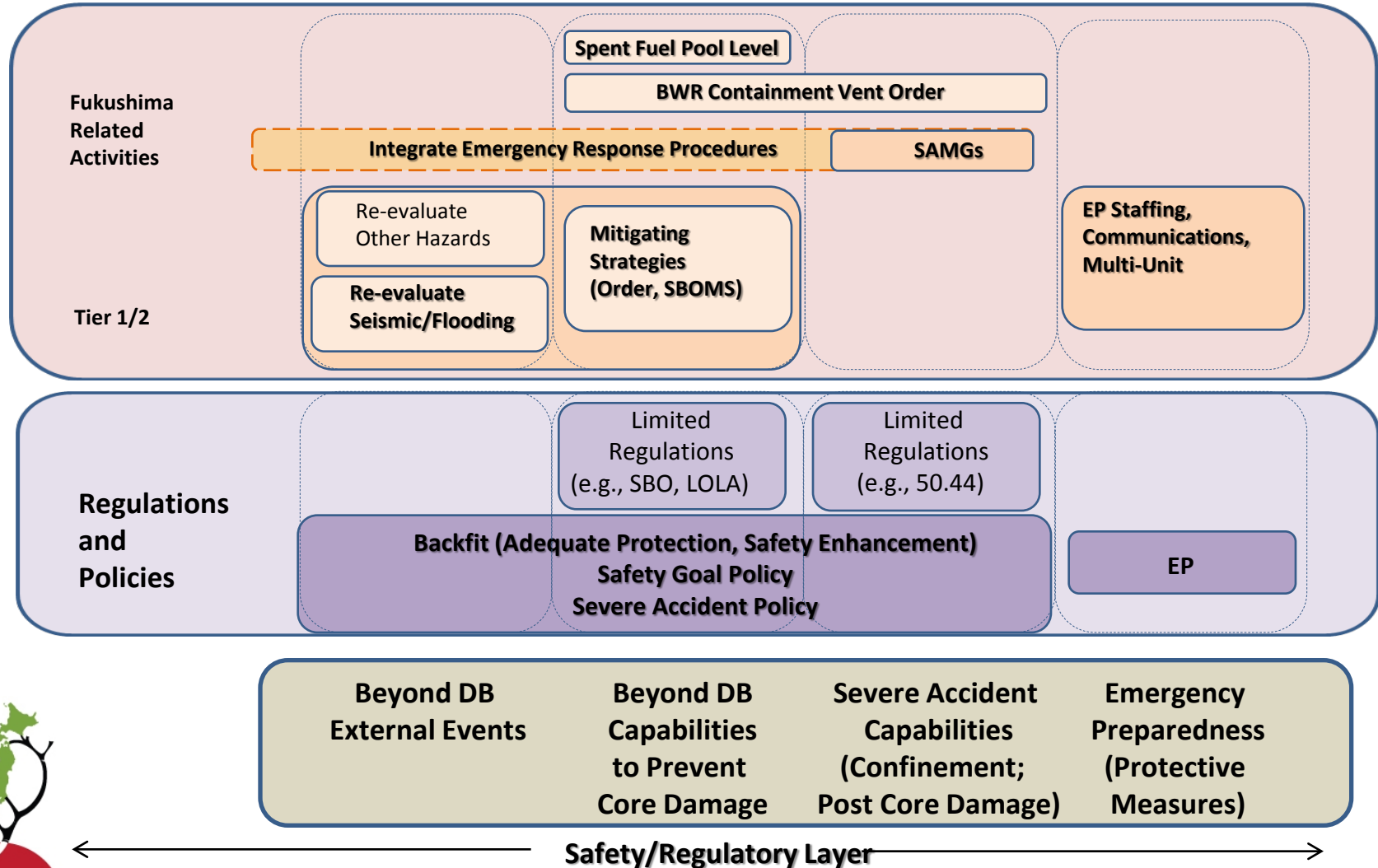
# Defense in Depth Within Regulatory Approach



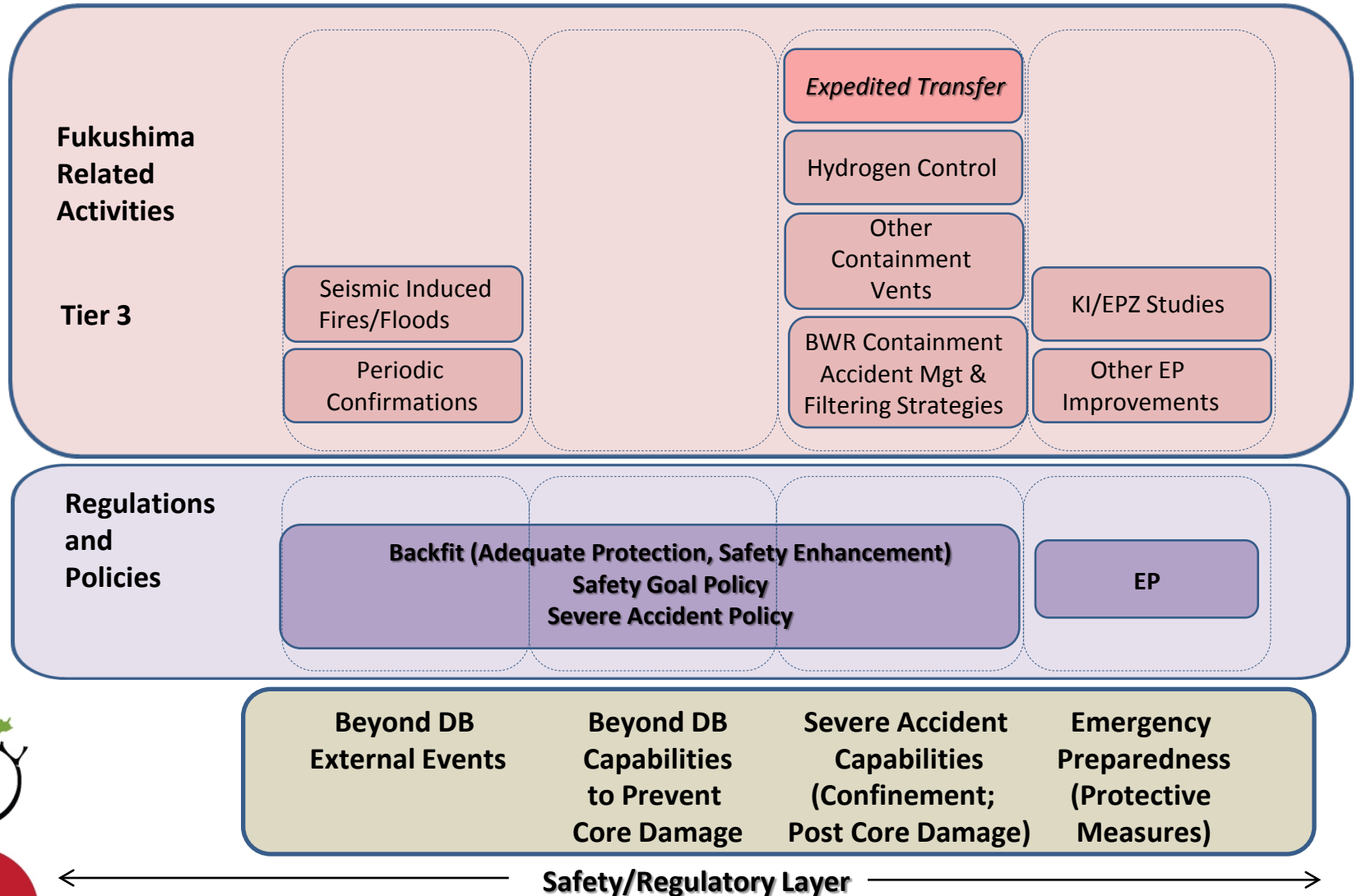
# Design Bases Events



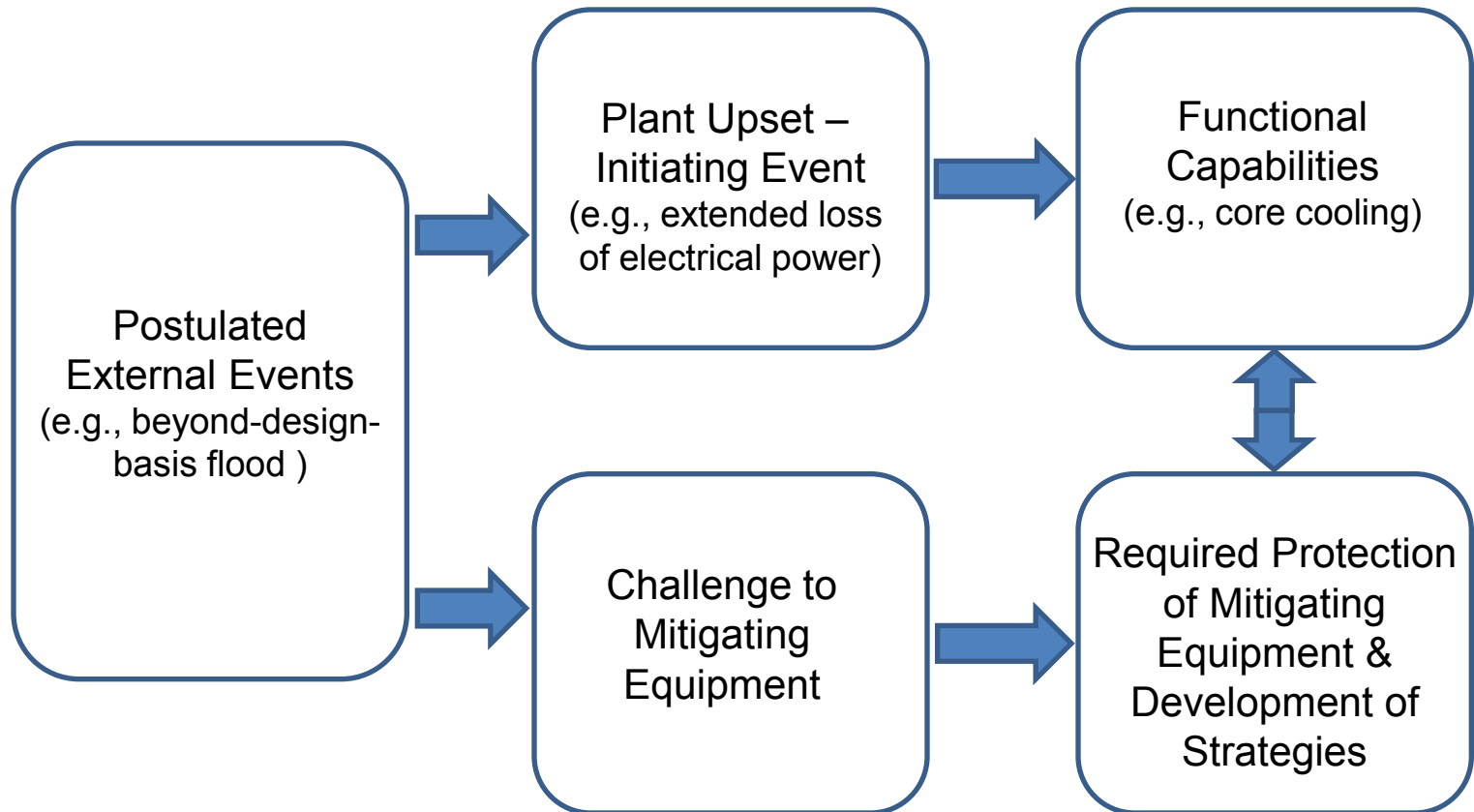
# Beyond Design Bases Events



# Tier 3 Evaluations



## Simplified Representation Mitigating Strategies for Beyond Design Basis External Events



## Mitigating Strategies “Acceptance Criteria”

Maintain or restore capabilities following a beyond-design basis external event for:

- core cooling,
- containment, and
- spent fuel pool cooling



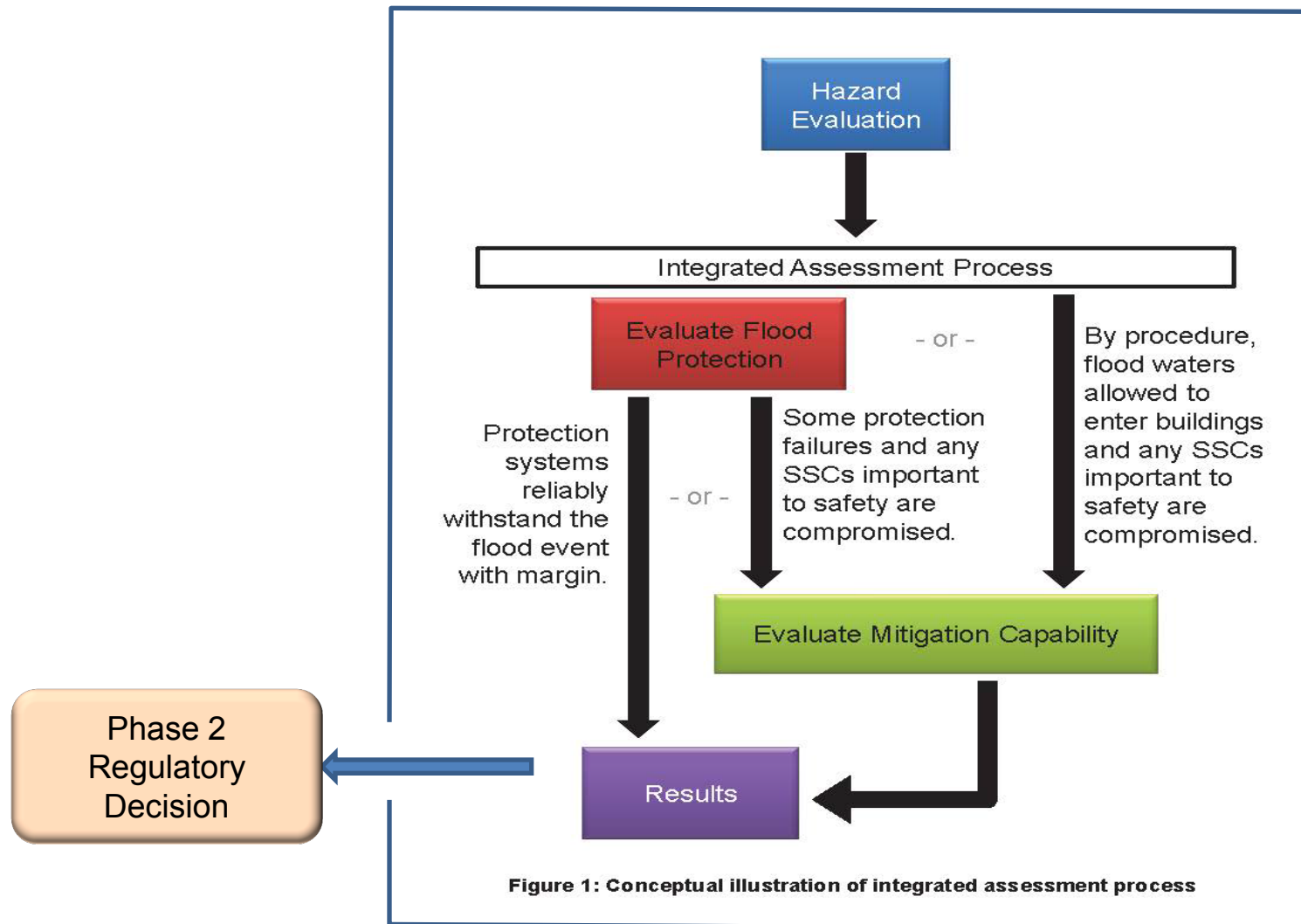


## **SBOMS Regulatory Basis (July 23, 2013)**

Since the purpose of the SBOMS rulemaking would be to provide mitigation capability for extreme external events, information from NTF Recommendation 2.1 regulatory activities or other re-evaluations of site-specific hazards would be relevant and need to be addressed and could result in changes to the facility. These changes could include changes to: installed equipment; portable equipment; portable equipment connections; and/or guidance and strategies. Consistent with Order EA-12-049 and related regulatory guidance, it is expected that the SBOMS rule would contain requirements to maintain the SBOMS capabilities, including the protection afforded the equipment consistent with any updated hazard analyses. The supporting SOC and regulatory guide would indicate that the meaning and intent of this provision would be to ensure that new information or operating experience feedback (e.g., new information about a re-evaluated hazard) that impacts the SBOMS equipment and strategies would need to be addressed, and the SBOMS strategies and equipment protection would be updated accordingly.



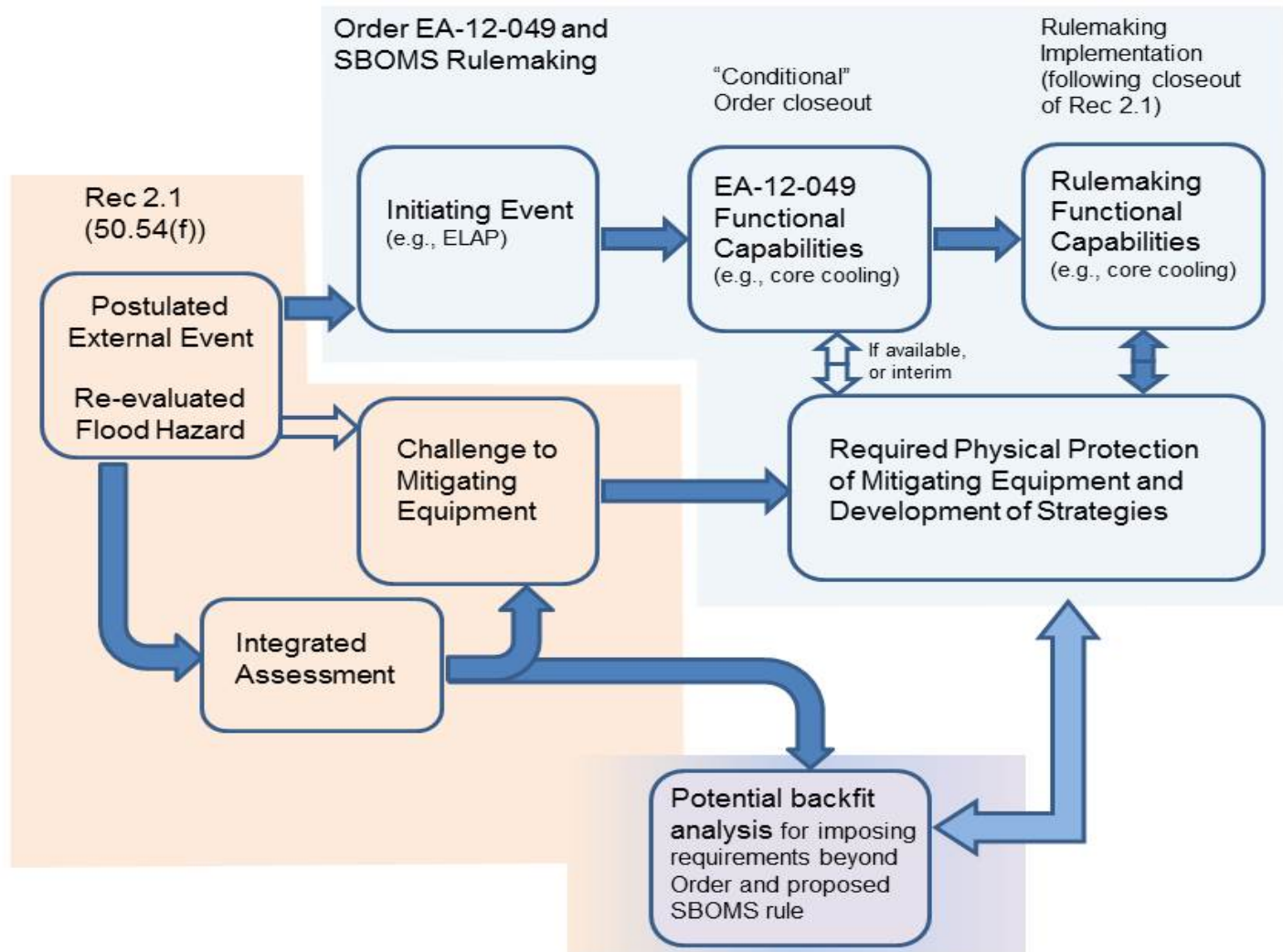
## Flooding Hazard Re-evaluations (JLD-ISG-2012-05)



- Maintain key safety functions during a flooding event
  - *Key safety functions*: The minimum set of safety functions that a plant must maintain to prevent core damage and large early release. These functions include reactivity control, reactor pressure control, reactor coolant inventory control, decay heat removal, and containment integrity in appropriate combinations to prevent core damage and large early release.



# Integration of Activities



# Next Steps

- Paper to Commission on Phase 2 decision-making and relationships between the recommendations
- Improve coordination between Japan lessons learned activities
- Revise guidance, if needed, to reflect improved integration of activities

