

FAQ 017: Hazards that Must be Evaluated

A. TOPIC: IA Scope: Hazards that must be Evaluated

Source document: IA ISG: JLD ISG 2012-05

Section: 5.2

B. DESCRIPTION:

Section 5.2 of JLD ISG 2012-05 ("Identification of Controlling Flood Parameters) contains the following statement: "...the integrated assessment should be performed for a set(s) of flood scenario parameters defined based on the results of the Recommendation 2.1 hazard reevaluations." Is an integrated assessment required if only a single associated effect of a flooding mechanism is not bounded by the current design basis?

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D. RESOLUTION: (Include additional pages if necessary. Total pages: 2)

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An integrated assessment is required if the parameters determined by a licensee's flooding reevaluation for any hazard exceed the parameters defined in the current licensing basis for that hazard. A condition where only a single associated effect of a flooding mechanism (e.g., debris loading) is not bounded by the current design basis would necessitate performance of an integrated assessment for that entire flooding mechanism. Furthermore, only that flooding mechanism would need to be included in the integrated assessment, not any other flooding mechanisms evaluated in the hazard report whose parameters do not exceed the flooding design basis.

Also, the NRC accepted flood hazard reevaluation defines the scope of the integrated assessment; it determines the scenarios that might have to be evaluated (i.e., the integrated assessment does not need to address scenarios arising from mechanisms that are not within the scope of the hazard report). Note that in order to understand the margins associated with the scenarios that are evaluated, if a flood protection feature or system cannot accommodate a flooding scenario, it should be determined at what flood height and under what associated effects the flood protection feature or system is no longer able to reliably accommodate the flood (see section 6.3, page 18, of JLD-ISG-2012-05).

Additionally, if one or more associated effects were not considered in the original design basis, those effects would be treated as being not bounded with respect to the need to perform an integrated assessment. (Note that flood event duration is treated differently; see FAQ 023.)

Please note it is important to understand the meaning of several terms that are used in the above description:

- "Mechanism" refers to a flooding event such as a hurricane, tsunami, local intense precipitation, or dam failure.
- "Parameter" refers to the specific results of a flooding evaluation of a mechanism, such as flood height, wind wave run-up, etc.
- "Associated effects" are parameters that are not the direct result of the flood mechanism, but result from the flood condition (e.g., debris loading, scouring, etc.)
- "Scenario" refers to a combination of parameters that are evaluated together in an

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integrated assessment. These parameters need not all come from the same mechanism if parameters from several mechanisms are grouped together to create a bounding condition.

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E. NRC Review:

Not Necessary_____

Necessary X

Explanation: _____

F. Industry Approval:

Documentation Method: June 6, 2013 meeting summary Date: 6/7/13

G. NRC Acceptance:

Interpretation

Agency Position _____

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