

Regulatory Information Conference 2012

Regulatory Actions on Extended Station Blackout Events: Extended Station Blackout

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NRC Order - Industry Suggested Wording

Each licensee shall develop, implement and maintain guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with beyond design-basis external hazards resulting in an extended loss of all AC power or loss of ultimate heat sink capability. Initially, the reactor is assumed to be operating at full power and is successfully shut down in advance of or as a result of the hazard.

Defense-in-Depth

	Emergency Plans		Emergency Plans
	SAMGs		SAMGs
Emergency Response	SAMGs	Increased Defense-in-Depth	Diverse & Flexible Coping Strategy (FLEX)
Prevention of Fuel Damage	SBO Coping Capability		SBO Coping Capability
Protection of Plant Equipment	Design Basis External Events		Design Basis External Events
	<i>Current</i>		<i>Current plus FLEX</i>

NEI Task Force

- ◆ Subcommittees
 - Guidance Development
 - Procedure Hierarchy
 - Design and Quality Requirements and Reasonable Protection
 - Rulemaking
- ◆ Products are in initial stages of development and may change greatly

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Safety Functions Considered

- ◆ Core Cooling
- ◆ Containment
- ◆ SFP Cooling

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Strategy

- ◆ Initially cope by relying on installed plant equipment
- ◆ Transition from installed plant equipment to onsite portable equipment
- ◆ Obtain additional capability and redundancy from offsite

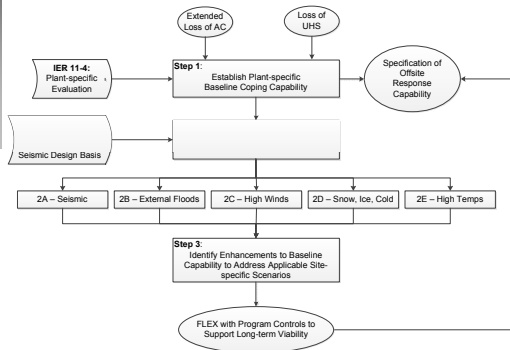
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Boundary Conditions

- ♦ Natural phenomena condition occurs impacting all units at site,
- ♦ All reactors on site initially operating at power, unless site has procedural direction to shutdown
- ♦ Each reactor is successfully shutdown when required (i.e., no ATWS)
- ♦ On site staff
- ♦ No independent, concurrent events

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Evaluation Process



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Considerations

- ♦ Protection of equipment
- ♦ Deployment of equipment
- ♦ Procedural interfaces
- ♦ Utilization of offsite resources

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