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**March 4, 2010**

**ATTACHED ARE SLIDES WHICH  
WERE PRESENTED AT THE  
JANUARY 20,2010 GENERIC TOPICS  
PUBLIC MEETING WITH  
INDUSTRY'S DESIGN-CENTERED  
WORKING GROUPS**

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# Aircraft Impact Assessment Rule Implementation Status

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# Aircraft Impact Assessment Rule

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- Impact of a large, commercial aircraft is a BEYOND-DESIGN-BASIS EVENT
- Rule requirements
  - Applicants must perform rigorous aircraft impact assessment
  - Applicants must incorporate design features to show facility can withstand aircraft impact with reduced use of operator action
  - Applicants are not required to submit actual assessment of the aircraft impact

# DCD Contents

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- DCD Chapter 19 AIA submittal should include:
  - A high-level description of assessment scope and methodology
  - A description of the design features and functional capabilities identified as a result of the aircraft impact assessment
  - A description of how those features and capabilities show, with reduced use of operator action, that the acceptance criteria in 10 CFR 50.150(a)(1) are met

# AIA DCD Submittals

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- AP1000                      9/2008
  - Possible revision after Shield Building design resolution
- ABWR (STP)                6/2009
- ESBWR                      8/2009
- USAPWR                    11/2009
- EPR                         12/2009
- ABWR (GEH)              mid 2010

# NRC Staff Review

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- NRC draft AIA DCD review guidance developed which will form basis for future SRP section
- Based on review of AIA DCD submittals, staff must find that:
  - Applicant conducted a reasonable assessment
  - Applicant adequately described AIA design features and functional capabilities
  - Applicant adequately described how AIA design features and functional capabilities show that:
    - Either the reactor core remains cooled or the containment remains intact, and
    - Either spent fuel cooling or spent fuel pool integrity is maintained

# AIA Methodology Guidance

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- ❑ NEI 07-13, *Methodology for Performing Aircraft Impact Assessments for New Plant Designs*
- ❑ NRC staff is endorsing NEI 07-13 in Regulatory Guide (RG) 1.217
- ❑ RG 1.217 issuance following February ACRS meeting

# AIA Inspection Activities

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- ❑ Assessments will be subject to inspection
- ❑ NRC may take appropriate enforcement action for any violations, including the preparation of an inadequate assessment or failure to prepare any assessment
- ❑ NRC staff will perform pilot inspection of the STPNOC AIA in Spring 2010



# AIA Inspection Activities

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- Staff will confirm:
  - A rigorous, design-specific assessment was performed consistent with 10 CFR 50.150(a) & NEI 07-13
  - The applicant has identified design features and functional capabilities to show that the acceptance criteria in 10 CFR 50.150(a)(1) are met

# AIA Inspection Activities

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- ❑ Based on lessons learned from pilot inspection, additional inspections will be scheduled
- ❑ Inspections will likely be scheduled to occur after industry peer review is complete
- ❑ Inspections will likely be scheduled to occur after NRC review of DCD submittal and be completed before DC rulemaking is completed (although this is not required)