

## **Enclosure 2**

**Transmittal of Public Session Presentation Slides to Support the  
Westinghouse-NRC Pre-Submittal Meeting on the Westinghouse  
AP300 SMR Safety Analysis Codes and Methodology White Paper**

**(Non-Proprietary)**

**October 2024**

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Enclosure 2

# AP300™ SMR Safety Analysis Codes and Methodology White Paper Pre-Submittal Meeting

October 17, 2024 – PUBLIC Session



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## Meeting Objective

- Purpose of this pre-submittal meeting is to describe the Advance Passive 300 (AP300) small modular reactor (SMR) safety analysis codes and methodology, which will be documented in a white paper to be submitted for NRC feedback as part of pre-application licensing activities.

**Updated Pre-Application Regulatory Engagement Plan submitted to NRC (reference ML24060A243 and ML24060A244)**

## AP300 SMR Safety Analysis Licensing Strategy

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- The AP300 SMR Design Control Document (DCD) submittal strategy for safety analysis:
  - Leverage the NRC-approved AP1000® design and analyses.
  - Submittal will include a set of analyses that demonstrate acceptability of the design.
  - Additional use of scaling evaluations that demonstrate plant safety.



## Safety Analysis Topics

- The white paper will include additional details regarding the following topics:
  - Use of ANSI 18.2 for event classification, consistent with AP1000.
  - Phenomena Identification and Ranking Table (PIRT) and Scaling Assessment.
  - Non-Loss-of-Coolant Accident (Non-LOCA) Analyses.
  - LOCA Analyses.
  - Short-Term Mass and Energy (M&E) Release and Subcompartment Pressurization Analyses.
  - Long-Term M&E Release and Containment Response Analyses.
  - Radiological Consequence Analyses.

## Desired Outcomes

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- Improved understanding of planned approach for AP300 safety analyses.
- Obtain feedback relative to the Westinghouse planned approach.



THANK YOU

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# AP300 SMR

The ONLY SMR based on N<sup>th</sup> of a Kind Operating Plants



Proven Technology



Advanced Safety



Readily Deployable

