

Enclosure 2

**Transmittal of Public Session Presentation Slides to Support the
Westinghouse-NRC Pre-Submittal Meeting on the Westinghouse
AP300 SMR Safety Classification and Seismic Categorization Approach White Paper**

(Non-Proprietary)

June 2024

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Enclosure 2

AP300™ SMR Safety Classification and Seismic Categorization Approach White Paper Pre-Submittal Meeting

June 24, 2024 – PUBLIC Session



Meeting Objective

- ▶ Purpose of this pre-submittal meeting is to describe the AP300 SMR safety classification and seismic categorization approach, which will be documented in a white paper to be submitted for NRC feedback as part of the pre-application licensing activities for AP300.

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

AP300 SMR Seismic Categorization Approach

- ▶ Describe and compare AP300 and AP1000 seismic categorization approaches.
- ▶ Seismic Category I is essentially the same as AP1000 design.
 - Applicable codes are updated to current versions, as applicable (i.e., ACI 349-13 and AISC N690-18).
- ▶ Non-seismic is also essentially the same as AP1000 design.
- ▶ Seismic Category II approach.
 - Seismic Category II applies to non-seismic Category I SSCs whose structural failure could impair the integrity of seismic Category I systems, structures, or components (SSCs) or result in injury to control room occupants.
 - AP1000 design uses seismic Category I design requirements for seismic Category II.
 - AP300 design will use same codes as non-seismic design, along with II/I interaction evaluations and AISC 341-16 ductile requirements.

Use of RG 1.143 Radwaste Requirements for portions of the Annex Building

- ▶ Reduced need for radwaste handling and onsite storage of solid and liquid radioactive waste for the AP300 allows elimination of the dedicated Radwaste Building used in the AP1000 NPP design.
- ▶ An area of the Annex Building is being allocated to accommodate the reduced quantity of solid and liquid radioactive waste.
- ▶ These portions of the Annex Building will be classified as RW-IIb in accordance with the guidance of RG 1.143.
- ▶ The RG 1.143 guidance will be used for the design of the Annex Building for housing RW-IIb waste considering more recent versions of the codes.

AP300 SMR Safety Classification Approach

- ▶ No significant changes from AP1000 Safety Classification approach.
- ▶ Chemical and Volume Control System design changes and resultant safety classification changes to portions of the system.
- ▶ Main Control Room Habitability Systems in AP1000 were safety-related, in AP300 these systems will be non-safety-related, as described in previous white paper SAPP-GW-GLR-003, “Concept of Operations.”



THANK YOU

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AP300 SMR

The ONLY SMR based on Nth of a Kind Operating Plants



Proven Technology



Advanced Safety



Readily Deployable

