

**Draft Limitations and Conditions Included in the NRC Staff's Draft Safety Evaluation of  
GEH Topical Report, "BWRX-300 Steel-Plate Composite Containment Vessel and Reactor  
Building Structural Design"**

Note: The NRC Staff received a clarification request of the following draft limitations and conditions. In preparation of the June 12, 2024 public meeting with GEH, these draft limitations and conditions are being made publicly available for the public's information.

8.1 Outside-of-Scope: The following structures, components, functional and design aspects (and any other explicitly stated in the LTR) are outside the scope of the BWRX-300 DPSC Structural Design LTR:

- f) DP-SC Module configurations different from those described and illustrated in Section 3.4 and not bounded by the NRIC Prototype Test Program (SE Section 3.2)
- j) Regarding LTR Section 5.13, as stated in Section N4.1 of ANSI/AISC N690-18, "The intended functions of the structure under a design basis fire shall be stated in the design basis documents. The provisions of Appendix N4 [Appendix 4 of ANSI/AISC 360-22 as modified] are for life safety associated with evacuation of building occupants in the event of a design basis fire. The Nuclear Specification [ANSI/AISC N690-18, Appendix N4] does not address either "Important to Safety" structural steel members or loading condition associated with a facility fire;" which therefore, is outside the LTR scope. (SE Sections 5.13 and 6.20; LTR Sections 5.13 and 6.20)

8.11 With reference to LTR Section 5.12, the integrated RB curved DP-SC walls (including SCCV walls) shall be designed and detailed to have a radius of curvature-to-wall panel thickness greater than 2.0 without exception. Further, any residual stresses and strains resulting from rolling of the curved plates shall be evaluated and incorporated in detailed design. (SE Sections 5.12 and 6.18; LTR Sections 5.12 and 6.18)