



ANP-10337 Rev. 0

Supplement 2P Rev. 0

Evaluation of the Effect of Grid
Crush on LOCA PCT

Pre-submittal Meeting
February 19, 2026



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Introduction / Purpose

NRC approved Framatome's original topical report, ANP-10337P/NP-A, Revision 0, "PWR Fuel Assembly Structural Response to Externally Applied Dynamic Excitations." (April 2018)

In addition, NRC approved ANP-10337, Revision 0, Supplement 1P/NP-A, Revision 0, "Deformable Spacer Grid Element." (September 2020)

ANP-10337 and Supplement 1 define grid deformation as the controlling criterion



Introduction / Purpose

Today's pre-submittal meeting is regarding ANP-10337, Revision 0, Supplement 2P/NP Revision 0, "Evaluation of the Effect of Grid Crush on LOCA PCT"

- The deformation patterns and levels are beyond those approved in ANP-10337 and are based on post-buckling grid tests and are applicable to LOCA events
- Present a simplified approach for evaluating the effect of predicted grid crush on LOCA peak cladding temperature (PCT)
- Supplement 2 represents an Uncomplicated NRC Review



Grid Deformation



Effect of Grid Deformation on FRA Fuel Products





Effect of Grid Deformation on LOCA





Effect of Grid Deformation on LOCA





Effect of Grid Deformation on PCT – Peripheral FAs





Effect of Grid Deformation on PCT – Interior FAs





Summary / Next Steps

Next Steps:

Submittal of Supplement 2 February 2026
 > Uncomplicated NRC Review

NRC Final SER February 2027

