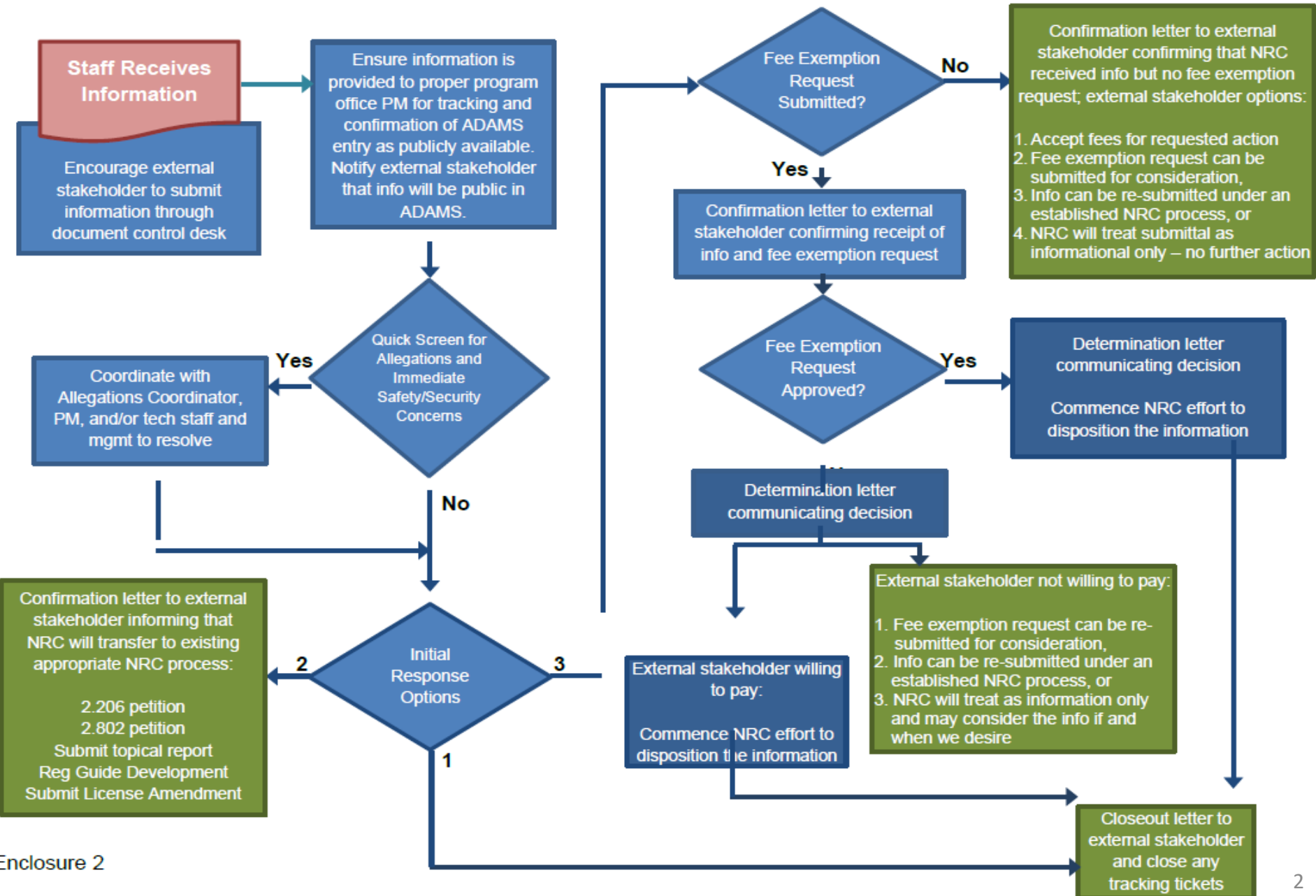


# **May 9, 2023, Meeting with Framatome and the NRC on Planned Fuel Fragmentation Relocation and Dispersal (FFRD) White Paper**

## **Discussion on Review Process**

# NRR External Document Process - COM-204



# Pre-application Activity

## Purpose

- To facilitate pre-application engagement.

## Benefits of Pre-application Activity

- Pre-submittal meeting(s) help facilitate discussions on planned submittal, the NRC staff's feedback, and expected submittal date, schedule, and review pathway.
- Opportunity for applicants to provide adequate technical detail concerning the approach, methods, and key assumptions
- Identify anticipated review challenges, significant changes from the existing state of practice, and information which requires additional attention during the review.

# White Paper Process

- Provides informal NRC staff feedback on technical topics to vendors/applicants.
- No regulatory finding or finality associated with the feedback
  - The NRC staff is making no regulatory findings on the white paper.
  - This paper, and its contents are subject to change and should not be interpreted as official agency positions.
- Applicant/vendor to provide specific questions to target NRC staff review and feedback.
- Applicant/vendor can request schedule and level of effort.
- A meeting may be scheduled during the review of the white paper to engage applicant/vendor on draft feedback.
- NRC issues feedback via letter.

# TerraPower White Paper

- TerraPower, LLC **Regulatory Gap Analysis Report (ML22266A285)**
  - The report provides TerraPower's determination of the applicability of the regulations contained in Title 10 of the Code of Federal Regulations associated with the Natrium™ design, a TerraPower and GE-Hitachi technology, and includes a discussion on potential exemption requests.
  - TerraPower is using Part 50 of Title 10 of the Code of Federal Regulations (10 CFR) to design, license, construct, and operate the Natrium reactor.
  - TerraPower is utilizing the methodology described in Revision 1 of Nuclear Energy Institute **(NEI) 18-04** (ML19241A472), "Risk-Informed Performance-Based Technology Inclusive Guidance for Non-Light Water Reactor Licensing Basis Development," as endorsed by **Regulatory Guide 1.233** (ML20091L698), "Guidance for a Technology-Inclusive, Risk-Informed, and Performance Based Methodology to Inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Non-Light-Water Reactors"
- **NRC staff observation on TerraPower White Paper (ML23080A086)**
  - Technical Assessment: General observation, Specific observations

# Questions?

## Summary and Next Steps