

From: [Maggie Staiger](#)
To: [Adrian Muniz](#); [Jorge Hernandez Munoz \(He/Him\)](#); [Zackary Stone \(He/Him/His\)](#)
Subject: [External_Sender] X-energy Readiness Assessment Logistic
Date: Tuesday, August 15, 2023 10:44:35 AM

Adrain, Zack, and Jorge,

Please find the below breakdown of the requested preapplication readiness assessment, please let me know if you have any questions.

Request:

Letter 2023-XE-NRC-021 submitted July 14th, 2023, requested a Preapplication Readiness Assessment of the Draft Safety Analysis Report for Dow and X-energy's Advanced Reactor Demonstration Program Construction Permit Application.

Purpose:

Submit draft Preliminary Safety Analysis Report content for NRC audit/review prior to submitting the 1- CRF Part 50 Construction Permit Application (CPA) to support an efficient and effective docketed regulatory review of the Xe-100 technology at the Dow Seadrift site.

Objectives:

Allow the NRC Staff to:

- Identify any required information that is missing from the application.
- Identify technical or regulatory issues that may complicate the acceptance or technical reviews of the application.
- Become familiar with the content of the applications, particularly in which areas where applicants' plan to propose new concepts or novel design features.

Preapplication Readiness Assessment Content Submittal Timeline:

Submittal 1 - October 2nd:

- Chapter 1
- Chapter 3*
 - 3.2 - LBE selection
 - 3.3 - AOOs
 - 3.7 - Structural analysis
 - 3.12 - Aircraft impact
 - 3.13 - Mitigation of beyond design basis events
- Chapter 4
- Chapter 5
- Chapter 6*
 - 6.1 – Design Requirements for SR SSCs
 - 6.2 – Reliability and Capability Targets for SR SSCs
 - 6.3 – Special Treatment Requirements for SR SSCs

- Chapter 7*
 - 7.1 - Reliability and Capability Targets for NSRST SSCs
 - 7.2 - Special Treatment Requirements for NSRST SSCs
- Chapter 10
- Chapter 11
- Chapter 12
- Part V : Exemptions and Non-applicabilities Identified

Submittal 2 - November 3rd:

- Chapter 3
 - The rest of what was left out in the Oct 2nd submission
- Chapter 6
 - All system descriptions (6.4.1 thru 6.4.14)
- Chapter 7
 - All system descriptions (7.3.1 thru 7.3.20)
- Chapter 8
- Chapter 9

* Some sections planned for Nov 3rd might be submitted earlier if ready

Note: Not in Scope of review

- Environmental Report
- Chapter 2
- Technical Specifications
- Supporting Technical Reports and Licensing Topical Reports

Proposed Logistics:

- Information provided in X-energy electronic reading room (eRR) under LIC-116 with folders for each Chapter and appropriate sub-folders depending on Chapter/Section content.
- Content will be provided in pdf format.
- PSAR Table of contents provided in eRR as supporting documentation.
- Propose 300 hours of review during duration of audit.

Proposed Coordination and Communication:

- Entrance meeting Oct 3rd to discuss overview of content and eRR folder structure.
- Weekly, 1 hour, status meetings (with option to add jump-up discussions)
- Exit Meeting mid-Dec

Requested Review Timeline:

- Submittal 1
 - Request comments to be shared as ready for release.
 - Final comments Received from NRC Nov. 3rd.
- Submittal 2

Request comments to be shared as ready for release.

- Final comments Received from NRC Dec. 15th.

Thanks,



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