



June 17, 2025

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Submission of Combined License Application for Fermi America President Donald J. Trump Advanced Energy and Intelligence Campus, Units 1 through 4

Fermi America respectfully submits this Combined License Application (COLA) for the proposed Fermi Units 1 through 4, to be in Carson County, Texas, at the President Donald J. Trump Advanced Energy and Intelligence Campus—commonly referred to as Project Matador. This submittal is pursuant to 10 CFR Part 52, Subpart C and is based on Revision 19 of the AP1000 Design Control Document (DCD).

This initial submittal represents a work in progress and is intended for review and early engagement with the U.S. Nuclear Regulatory Commission (NRC). Fermi America sees nuclear as a key enabler of our vision and essential for the United States to become dominant in both nuclear technology and winning the Artificial Intelligence (AI) race. To enable this vision and ensure a timely, effective, and thorough NRC review, Fermi America believes it is advantageous to implement a phased approach for submittal and review in which we provide information to the NRC as soon as it is ready, rather than to wait for all information that may be ultimately required to come in. This approach aligns with NRC's lessons learned on engaging as early as practicable to identify potential challenges, set realistic review schedules, and address challenges in real time.

As an example, site specific engineering continues to mature, Fermi America proposes submitting the Final Safety Analysis Report (FSAR) chapters in the following subsequent submissions to this initial filing:



Future Submission	FSAR Chapters	
No. 1	Ch. 1 (Introduction and General Description of the Plant) Ch. 4 (Reactor) Ch. 5 (Reactor Coolant System and Connected Systems) Ch. 7 (Instrumentation and Controls) Ch. 16 (Technical Specifications) Ch. 17 (Quality Assurance Program Description)	Ch. 6 (Engineered Safety Features) * Ch. 10 (Steam and Power Conversion) * Ch. 11 (Radioactive Waste Management) * Ch. 12 (Radiation Protection) * Ch. 14 (Initial Test Program) * Ch. 18 (Human Factors Engineering) * Ch. 19 (Probabilistic Risk Assessment) *
No. 2	Ch. 2 (Site Characteristics) Ch. 3 (Design of Structures, Components, and Systems) Ch. 8 (Electric Power)	Ch. 9 (Auxiliary Systems) Ch. 13 (Conduct of Operations) Ch. 15 (Accident Analysis) Ch. 6 (Engineered Safety Features) Ch. 10 (Steam and Power Conversion) Ch. 11 (Radioactive Waste Management) Ch. 12 (Radiation Protection) Ch. 14 (Initial Test Program) Ch. 18 (Human Factors Engineering) Ch. 19 (Probabilistic Risk Assessment)

*Note: These chapters can be largely completed without site specific information. Consistent with the approach outlined above, Fermi America anticipates an initial filing in Submission 1 followed by additional site-specific specific details in Submission 2, hence the duplication of chapters in submissions.

We will work with the NRC staff in the next few weeks to align on the timing for submittal of these chapters. Consistent with the approach described above, we acknowledge that final submittal for docketing will require formal certification that all content is complete to the extent required and conforms with Regulatory Guide 1.206, Revision 1.



The application is organized into the following eleven parts, consistent with the guidance provided in RG 1.206, Rev. 1:

Part No.	Title	Current Status
1	General and Financial Information	Complete
2	Final Safety Analysis Report (FSAR)	Future plans – incorporating Revision 19 of the AP1000 Design Certification Document (DCD) and some Fermi site supplements. This section will incorporate by reference the most up-to-date AP1000 design certification and recent AP1000 deployment experience.
3	Environmental Report	Based on recent site studies and RG 4.2 guidance
4	Technical Specifications	Pending integration of plant-specific parameters
5	Emergency Plans	Future plans
6	Security Plans	Future plans
7	Departures and Exemption Requests	None currently
8	SGI and Security-Related Information	Placeholder – Pending organizational development with appropriate security clearance and PANTEX coordination
9	Withheld Proprietary Information	None currently
10	ITAAC Closure Process	Placeholder – Pending development and consideration of lessons-learned
11	Enclosures	Outlined – Must include supporting documents and certifications

Forward Thinking Approach:

Fermi America's project will implement an innovative, forward thinking, deployment model that leverages the existing AP1000 design and NRC regulatory structure, while avoiding unnecessary over-conservatism that have caused the nuclear industry to be unsuccessful. While "complete" Nuclear Island separation is not feasible for the AP1000 without fundamental redesign that would compromise its established design certification, Fermi America's intended graded implementation of separation principles offers benefits within the constraints of the existing design. This graded approach maintains the AP1000's established safety features while setting clear boundaries for quality requirements and regulatory oversight. Thus enabling:

1. Cost savings through commercial-grade construction of non-safety systems
2. Simplified procurement processes for portions of the plant scope
3. Reduced documentation requirements
4. More efficient construction, operations, and maintenance execution and management



For the proposed graded approach to separation, workshops will be conducted among Fermi America, its contractors, and NRC staff to:

1. Define the specific physical boundaries between safety-related and non-safety-related systems
2. Establish clear documentation standards for these boundaries
3. Develop consistent quality assurance expectations for systems on both sides of these boundaries
4. Align understanding of the regulatory oversight scope for nuclear versus non-nuclear portions

The graded approach outlined above maintains the AP1000's established safety features while setting clear boundaries for quality requirements and regulatory oversight.

Prior Interactions with NRC:

Fermi has initiated pre-application engagements with the NRC Staff, including informal discussions on licensing strategy, regulatory precedents for replicating reactor configurations, and application readiness. These discussions have helped shape our approach and as discussed above, we anticipate additional engagement in support of FSAR content and environmental review scoping.

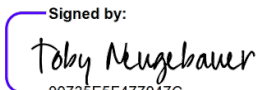
Primary Point of Contact:

All communications regarding this application should be directed to:

Toby Neugebauer
Chief Executive Officer
3401 Armstrong Avenue
Dallas, TX 75205

Fermi welcomes ongoing technical engagement with NRC staff and will provide updates to this COLA at regular intervals to support an efficient and transparent licensing process. For specific licensing inquiries, please direct all questions to our licensing office by email to nuclearlicensing@fermiamerica.com.

Sincerely,

Signed by:

00735E5F477047C...
Toby Neugebauer
Chief Executive Officer
Fermi, LLC (dba Fermi America)

Enclosures:

Combined License Application for Donald J. Trump Generating Plant Units 1 through 4 (Parts 1–11, as listed)