



Advanced Reactor Landscape: Current Status and Moving Forward

Licensing of the Natrium® Reactor and Construction Update

George Wilson, Sr. VP, Regulatory Affairs,
TerraPower, LLC

Achieving Success: Kemmerer Unit 1 CPA

Early and robust engagement **catalyzed** an expedited review.



Early Engagements

- More than 60 pre-application meetings
- Pre-application readiness assessment
- 15 NRC-approved topical reports
- Three technical reports
- Six white/information papers

CPA = Construction Permit Application
SE = Safety Evaluation
EIS = Environmental Impact Statement

Licensing Milestones

Application
Accepted,
May 2024

Draft SE, March 2025

Draft EIS,
June 2025

Final SE & EIS by
Dec. 2025

Construction Permit
Issued, March 2026

Current Status: Kemmerer Unit 1 Licensing

Building on CP success through robust and early engagement to **de-risk** issues.



OL Application

- Progressing application through FSAR, Revision A
- Targeting OL application submittal to NRC by March 2028

Early Engagements

- Submitted a regulatory engagement plan (October 2025) and updated plan (March 2026)
- Effectively leveraging electronic reading room and pre-submittal meetings

Planned Licensing Submittals

- Comprehensive vibration assessment program (TR)
- Dual unit design (TR)*
- Technical specifications development (TR)
- Type 1A fuel qualification plan (TR addendum)*
- QAPD for USO (TR)
- Emergency Action Levels (TR)

OL = Operating License
CP = Construction Permit
FSAR = Final Safety Analysis Report
QAPD = Quality Assurance Program Description
TR = Topical report
* = generic topical report

Oversight of Construction

Defense-In-Depth Approach to Quality Oversight

- Quality Assurance (USO)
 - Independent supplier audits to verify Quality Assurance Program implementation
- Regulatory Construction Oversight Group (TerraPower and USO)
 - Independent construction inspections based on Federal, State, and local requirements
 - Support to NRC and other regulators during their inspections
- Vendor Quality Program (Construction Contractor and Suppliers)
 - Quality control inspections, field surveillance, and verification that work conforms to approved design and quality requirements



Construction Jobsite Layout

Reactor Fabrication Building Foundation

Reactor Cavity

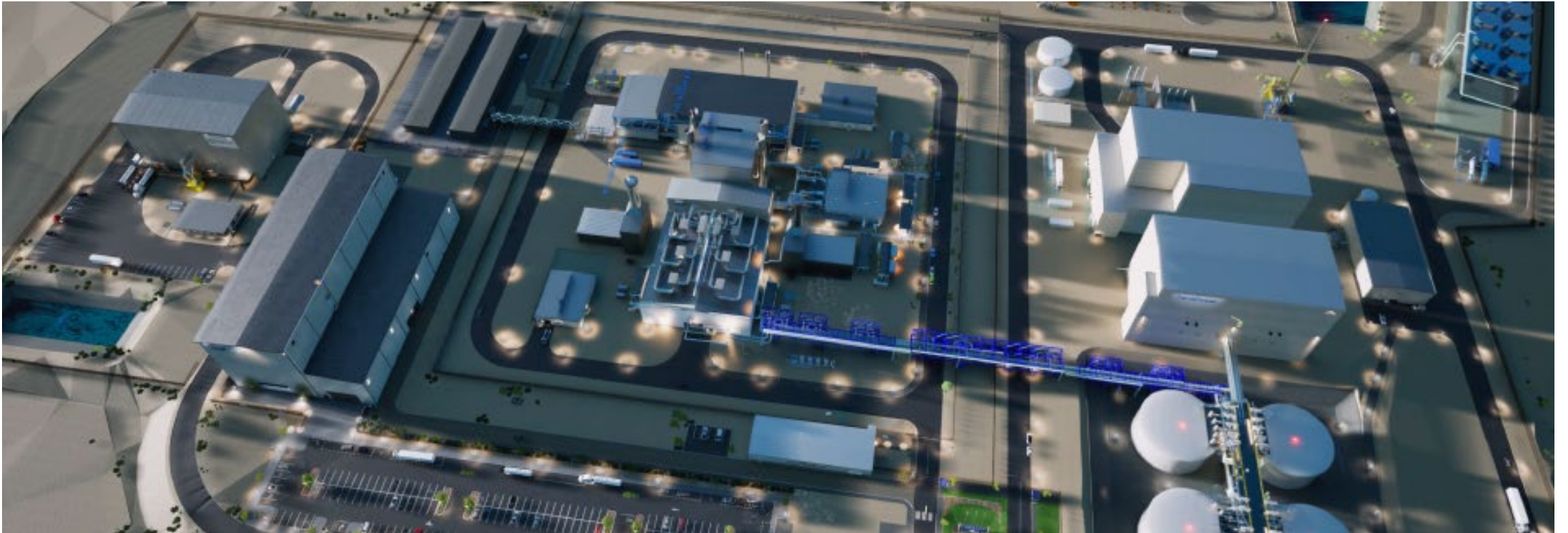
Craft Labor Parking

Laydown Area

Training Center



Kemmerer Unit 1 Site Layout



Thank you

To learn more, visit www.terrapower.com