



EDEN

RADIOISOTOPES

NRC Pre-application Meeting 7-16-2020

Roadmap

- Eden Updates
- Submissions
- Status of Application
- Update on Application Format

Eden Updates

- During coronavirus quarantines, Eden has been consistently working towards the development of its FSAR.
- Eden has recruited numerous contractors and consultants with a variety of NRC experience.
- Eden's licensing manager, Mike Raddatz, to oversee process going forward.

Mike Raddatz Experience

- Nuclear Process Engineer and Licensing Manager with the US Nuclear Regulatory Commission, with over 20 years experience conducting Licensing & Compliance reviews and Project Management under the auspices of 10 CFR Parts: 20, 40, 50, 70, 71, 72, and 76 for both new and legacy nuclear facilities.
- Mr. Raddatz also has specialized experience in licensing of transportation and storage of spent nuclear fuel, having served as senior licensing manager for the most modern and the oldest of US Fuel Cycle Facilities.
- More specifically, NRC experience includes the Senior Project Manager for Louisiana Energy Services Gas Centrifuge Facility (UUUSA) in Eunice, New Mexico, construction inspector, lead trainer of the Fuel Cycle operations and regulatory requirements, qualification and training of accident response personnel, and Nuclear Security and Incident Response (NSIR) developing Real-Time plume (chemical) analysis visualization software for accident response to Fuel-Cycle Facility accidents.

Submissions

- SGI program re-submitted 7/2/2020 (originally submitted 6/9/2020)

Status of FSAR

- Application still scheduled for completion and submission by Oct. 1, 2020 (FSAR + ER)
- Final chapters are being wrapped up and sent out for external review and legal review
- Today's focus will be on Ch 4A

Update on Application Format

- Initial approach was to submit SAR chapters (including Part 30, 50, 70 activities, etc. As appropriate in 3 parts (ISG-1537 Format)
 - Part "A": Reactor
 - Part "B": Hot Cells
 - Part "C": Target Fabrication
- As application was developed, target fabrication descriptions were redundant with those of the Hot Cell Facility
 - New format will include Target Fabrication description under Hot Cell Facility portion (4B)
 - Described in 4.b.4.2: Processing of Unirradiated Special Nuclear Material
 - Consistent with recommendations from ISG-1537
 - Activities will be incorporated into other chapters & ISA
- New Licensing Format:
 - Part "A": Reactor activities
 - Part "B": Hot Cell & Target Fabrication activities

Rationale of New Format

Under previous thinking, we were considering incorporating 4C, 6C, 7C, etc..., but there was enough redundancy that the target fabrication aspects of the application could be reduced to the 4B section and an ISA for the activity. The contents of what would have been 4C are now incorporated into 4b.4.2: Processing of Unirradiated Special Nuclear Material.

FSAR Status

- Eden is still pursuing the one-step license approach, discussed in previous meetings
- FSAR requirements are included 50.34(b)
- Final designs are included and incorporated at a functional design requirement level
- Goal of today's discussion:
 - Introduce content of 4A to illustrate:
 - Approach
 - Level of detail
 - Analysis